



Louisville Metro Air Pollution Control District
850 Barret Avenue
Louisville, Kentucky 40204-1745



Title V Operating Permit

Permit No.: 142-97-TV (R4)

Plant ID: 1216

Effective Date: 4/26/2013

Expiration Date: 4/30/2018

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

BAE Systems
163 Rochester Drive
Louisville, KY 40214

The applicable procedures of District Regulation 2.16 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Application No.: 27681
37377; 864176

Application Received: 2/2/2005
4/8/2013; 12/4/2013

Permit Writer: Yiqiu Lin

Administratively Complete: 4/3/2005

Date of Public Notice: 12/13/2012

Date of proposed permit: 2/06/2013

A handwritten signature in blue ink, appearing to read "Paul Gaud".

Air Pollution Control Officer
January 22, 2014

TABLE OF CONTENTS

Title V Permit Revisions/Changes 5

Abbreviations and Acronyms 6

Preamble 7

General Conditions 8

Plant-wide Limits 17

 Applicable Regulations: 17

 Specific Conditions 17

 Comments 18

Emission Unit U1: Paint booths for coating metal and non-metal parts 20

 U1 Applicable Regulations 20

 U1 Equipment 21

 U1 Control Devices 21

 U1 Alternative Operating Scenarios 21

 U1 Specific Conditions 22

 U1 Comments 26

Emission Unit U3: Plating Shop (Building 117) 28

 U3 Applicable Regulations: 28

 U3 Equipment: 29

 U3 Control Devices: 33

 U3 Specific Conditions 34

 U3 Comments 50

Emission Unit U5: Fiberglass Repair Application 52

 U5 Applicable Regulations: 52

 U5 Equipment: 52

 U5 Control Device: 52

 U5 Specific Conditions 53

 U5 Comments 54

Emission Unit U6: Cold Solvent Parts Cleaners without Secondary Reservoirs 55

 U6 Applicable Regulations: 55

 U6 Equipment: 55

 U6 Control Devices: 55

 U6 Specific Conditions 56

 U6 Comments 58

Emission Unit U8: Vapor Degreaser with Refrigerated Condenser 59

 U8 Applicable Regulations: 59

 U8 Equipment: 59

 U8 Control Devices: 60

U8 Specific Conditions 61
 U8 Comments 64

Emission Unit U10: Spray Coating Operation for Adhesive and Fire Retardant 65
 U10 Applicable Regulations: 65
 U10 Equipment: 65
 U10 Control Devices: 65
 U10 Specific Conditions 66
 U10 Comments 68

Emission Unit U11: Natural gas furnace and space heaters 69
 U11 Applicable Regulations: 69
 U11 Equipment: 69
 U11 Control Devices: 69
 U11 Specific Conditions 70
 U11 Comments 71

Emission Unit U12: Shot blast cabinets 72
 U12 Applicable Regulations: 72
 U12 Equipment: 72
 U12 Control Device: 73
 U12 Specific Conditions 74
 U12 Comments 77

Emission Unit U16: JBI spray booth for coating miscellaneous metal parts 78
 U16 Applicable Regulations: 78
 U16 Equipment: 79
 U16 Control Devices: 79
 U16 Specific Conditions 80
 U16 Comments 84

Emission Unit U17: Blast booths..... 85
 U17 Applicable Regulations: 85
 U17 Equipment: 85
 U17 Control Devices: 86
 U17 Specific Conditions 87
 U17 Comments 91

Permit Shield..... 93

Off-Permit Documents..... 93

Alternative Operating Scenario..... 93

Insignificant Activities..... 93

Emission Unit IA1: Storage tanks..... 96
 IA1 Applicable Regulations:..... 96

IA1 Equipment:..... 96
 IA1 Control Devices: 96
 IA1 Specific Conditions..... 97
 IA1 Comments 97

Emission Unit IA2: Parts washers with secondary reservoirs 98
 IA2 Applicable Regulations:..... 98
 IA2 Equipment:..... 98
 IA2 Control Devices: 98
 IA2 Specific Conditions..... 99
 IA2 Comments 101

Emission Unit IA3: Minor VOC emission units..... 102
 IA3 Applicable Regulations:..... 102
 IA3 Equipment:..... 102
 IA3 Control Devices: 102
 IA3 Specific Conditions..... 103
 IA3 Comments 104

Emission Unit IA4: Two (2) emergency generators 105
 IA4 Applicable Regulations:..... 105
 IA4 Equipment:..... 105
 IA4 Control Devices: 105
 IA4 Specific Conditions..... 106

Appendix A - 40 CFR 63, Subpart M (MACT) 112
 Specific Conditions 112
 Comments 136

Appendix B - Protocol Checklist for Performance Test 137

[End of Document] 138

Title V Permit Revisions/Changes

Revision No.	Issue Date	Public Notice Date	Type	Attachment No./Page No.	Description
Initial	8/2/2000	4/23/2000	Initial	Entire Permit	Initial Issuance
R1	1/14/2003	N/A	Administrative	Emission Unit PE1-12	Incorporate PS3 and PS6 performance indicator range
R2	03/26/2013	12/13/2012	Renewal/ Administrative	Entire Permit/ Cover Page	Permit renewal and incorporate construction permits 28-10, 29-10, 29845-10, and 31207-11. / Change "180 days" to "six months"
R3	07/17/2013	N/A	Administrative	Emission Unit U17, IA4	Permit revised to correct performance indicators for U17 and add appropriate monitoring, record keeping and reporting for the performance indicators, add insignificant emission unit IA4 for two emergency generators
R4	01/22/2014	N/A	Administrative	Emission Unit U8, Table of Applicable Regulations, Emission Unit U11 Description	Removed section 4 of Regulation 6.18 and added section 5 of Regulation 6.18. Update description of U11 equipment.

Abbreviations and Acronyms

AFS	-	AIRS Facility Subsystem
AIRS	-	Aerometric Information Retrieval System
APCD	-	Air Pollution Control District
ASL	-	Adjusted Significant Level
atm	-	Atmosphere
BACT	-	Best Available Control Technology
Btu	-	British Thermal Unit
CEMS	-	Continuous Emission Monitoring System
CAAA	-	Clean Air Act Amendments (15 November 1990)
HAP	-	Hazardous Air Pollutant
hr	-	hour
lbs	-	Pounds
l	-	Liter
MACT	-	Maximum Achievable Control Technology
m	-	Meter
mg	-	Milligram
mm	-	Millimeter
MM	-	Million
MOCS	-	Management of Change System
NAICS	-	North American Industry Classification System
NSR	-	New Source Review
NO _x	-	Nitrogen oxides
NSPS	-	New Source Performance Standards
PM	-	Particulate Matter
PM ₁₀	-	Particulate matter less than 10 microns
ppm	-	Parts per million
PSD	-	Prevention of Significant Deterioration
PMP	-	Preventive Maintenance Plan
psia	-	Pounds per square inch absolute
RACT	-	Reasonably Available Control Technology
SC	-	Specific Condition
SIC	-	Standard Industrial Classification
SIP	-	State Implementation Plan
SO ₂	-	Sulfur dioxide
TAC	-	Toxic Air Contaminant
TAL	-	Threshold Ambient Limit
TAP	-	Toxic Air Pollutant
tpy	-	Tons per year
UTM	-	Universal Transverse Mercator
VOC	-	Volatile Organic Compound

Preamble

Title V of the Clean Air Act Amendments of 1990 required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Louisville Metro Air Pollution Control District (LMAPCD) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations".

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit general conditions define requirements which are generally applicable to all Title V companies under the jurisdiction of LMAPCD. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the general conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The general conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The source's Title V permit may include a current table of "insignificant activities."

Insignificant activities are defined in District Regulation 2.16 section 1.22, as of the date the permit was proposed for review by U.S. EPA, Region 4.

Insignificant activities identified in District Regulation 2.02, Section 2 may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.

Insignificant activities identified in District Regulation 2.02, Section 2 shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.

General Conditions

1. **Compliance** - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. (Regulation 2.16, sections 4.1.3, 4.1.13.1 and 4.1.13.7)
2. **Compliance Certification** - The owner or operator shall certify, annually or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification directly to the following address as well as to the District, as set forth in Regulation 2.16, section 4.3.5.4:

*US EPA - Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960*

3. **Compliance Schedule** - A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:
 - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.
 - b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.
4. **Duty to Supplement or Correct Application** - If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, it shall,

upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

5. **Emergency Provision**

- a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - i. An emergency occurred and that the owner or operator can identify the cause of the emergency.
 - ii. The permitted facility was at the time being properly operated.
 - iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.
 - iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- c. This condition is in addition to any emergency or upset provision contained in an applicable requirement. (Regulation 2.16, sections 4.7.1 through 4.7.4)

6. **Emission Fees Payment Requirements** - The owner or operator shall pay annual emission fees in accordance with Regulation 2.08. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. (Regulation 2.08, section 1.3)

7. **Emission Offset Requirements** - The owner or operator shall comply with the requirements of Regulation 2.04.

8. **Enforceability Requirements** - Except for the conditions that are specifically designated as "District Only Enforceable Conditions", all terms and conditions of this permit,

including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. (Regulation 2.16, sections 4.2.1 and 4.2.2)

9. **Enforcement Action Defense**

- a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation. (Regulation 2.16, sections 4.1.13.2 and 4.1.13.3)

10. **Hazardous Air Pollutants and Sources Categories** - The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.

11. **Information Requests** - The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. (Regulation 2.16, section 4.1.13.6)

If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA. (Regulation 2.07, section 10.2)

12. **Insignificant Activities** - The owner or operator shall:

- a. Notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. (Regulation 2.16, section 5)
- b. Submit a current list of insignificant activities by April 15 of each year with the annual compliance certification, including an identification of the additions and removals of insignificant activities that occurred during the preceding year. (Regulation 2.16, section 4.3.5.3.6)

13. **Inspection and Entry** - Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:

- a. Enter the premises to inspect any emissions-related activity or records required in this permit.

- b. Have access to and copy records required by this permit.
- c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.
- d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements. (Regulation 2.16, section 4.3.2)

14. **Monitoring and Related Record Keeping and Reporting Requirement** - The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be January 1st through June 30th and July 1st through December 31st of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement. All semi-annual compliance reports shall include the following certification statement per Regulation 2.16.

- “Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete”.
- Signature and title of company responsible official.

If a change in the “Responsible Official” (RO) occurs during the term of this permit, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days following the date a change in the designated RO occurs for this facility.

The semi-annual compliance reports are due on or before the following dates of each calendar year:

<u>Reporting Period</u>	<u>Report Due Date</u>
January 1 through June 30	August 29 th
July 1 through December 31	March 1 st

Note:

¹ The date for leap years is February 29.

15. **Off-permit Documents**- Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit

document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, Section 5. (Regulation 2.16, section 4.1.5)

16. **Operational Flexibility** - The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.
17. **Permit Amendments (Administrative)** - This permit can be administratively amended by the District in accordance with Regulation 2.16, sections 2.3 and 5.4.
18. **Permit Application Submittal** - The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.
19. **Permit Duration** - This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.
20. **Permit Renewal, Expiration and Application** - Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.
21. **Permit Revisions** - No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. (Regulation 2.16, section 4.1.16)
22. **Permit Revision Procedures (Minor)** - Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.
23. **Permit Revision Procedures (Significant)** - A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and Permit renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.
24. **Permit Revocation and Termination by the District** - The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1.1 through 5.11.1.5. For purposes of Section 5, substantial or unresolved noncompliance includes, but is not limited to:

- a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment.
 - b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District.
 - c. Knowingly making any false statement in any permit application.
 - d. Noncompliance with Regulation 1.07, section 4.2; or
 - e. Noncompliance with KRS Chapter 77.
25. **Permit Shield** - The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.
 26. **Prevention of Significant Deterioration of Air Quality** - The owner or operator shall comply with the requirements of Regulation 2.05.
 27. **Property Rights** - This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.
 28. **Public Participation** - Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, Section 1; and 2.16, sections 5.1.1.2 and 5.5.4.
 29. **Reopening For Cause** - This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.
 30. **Reopening for Cause by EPA** - This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.
 31. **Risk Management Plan (112(r))** - For each process subject to Section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.
 32. **Severability Clause** - The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected. (Regulation 2.16, section 4.1.12)
 33. **Stack Height Considerations** - The owner or operator shall comply with the requirements of Regulation 2.10.
 34. **Startups, Shutdowns, and Upset Conditions Requirements** - The owner or operator shall comply with the requirements of Regulation 1.07.

35. **Submittal of Reports, Data, Notifications, and Applications**

- a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.11.7 shall be submitted to:

*Louisville Metro Air Pollution Control District
850 Barret Ave
Louisville, KY 40204-1745*

- b. Documents which are specifically required to be submitted to EPA as set forth in Regulation 2.16 sections 3.3, and 5.8.5 shall be mailed to EPA at the following address:

*US EPA - Region IV
APTMD - 12th floor
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-3104*

- 36. **Other Applicable Regulations** - The owner or operator shall comply with all applicable requirements of the following:

Federally Enforceable Regulations:

Regulation	Title
1.01	General Provisions
1.02	Definitions
1.03	Abbreviations And Acronyms
1.04	Performance Tests
1.05	Compliance With Emissions Standards And Maintenance Requirements
1.06	Source Self-Monitoring and Reporting
1.07	Emissions During Shutdowns, Malfunctions, Startups, and Emergencies
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
2.01	General Application
2.02	Air Pollution Regulation Requirements and Minor Facility Exemptions
2.03	Permit Requirements - Non-Title V Construction and Operating Permits and Demolition/Renovation Permits

Regulation	Title
2.07	Public Notification for Title V, PSD, and Other Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.16	Title V Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)

District Only Enforceable Regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors
2.08	Emission Fee, Permit Fees and Permit Renewal Procedures
5.00	Definitions
5.01	General Provisions
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants

37. **Stratospheric Ozone Protection Requirements** - Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:

- a. Any facility having any refrigeration equipment normally containing fifty (50) pounds of refrigerant, or more, must keep servicing records documenting the date

and type of all service and the quantity of any refrigerant added according to 40 CFR 82.166;

- b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
- c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166.
- d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined in 40 CFR 82.152) for service, maintenance, or repair unless the person has been properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;
- g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40CFR82 Subpart A, Production and Consumption Controls. (Regulation 2.16, section 4.1.5)

Plant-wide Limits

Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 4, 5
2.05	Prevention of Significant Deterioration of Air Quality	1
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19

Specific Conditions

S1. Standards (Regulation 2.16, section 4.1.1)

a. **VOC**

The owner or operator shall not allow the combined plant-wide VOC emissions to exceed 255 lb per day during the ozone season of April 1 through October 31. (Regulation 6.43, sections 19.1 and 19.2)

b. **PM/PM₁₀**

The owner or operator shall not allow plantwide PM/PM₁₀ emissions to exceed 100 tons per 12 consecutive month period. (Regulation 2.05) (See Comment 1)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

i. An owner or operator of an affected facility subject to this regulation shall either presume the maximum potential daily VOC emissions as calculated for those units or maintain records that include, but not be limited to, the following: (Regulation 6.43, section 19.3) (See Comment 3)

- 1) Product name for each coating, solvent, and cleaner used each day;
- 2) Total daily gallons of each product used;
- 3) VOC content of each product, in pounds per gallon; and

4) Total daily VOC emissions

- ii. The owner or operator shall monthly calculate and maintain records of the combined plantwide VOC emissions for each day during the ozone season of April 1 through October 31.

b. **PM/PM₁₀**

The owner or operator shall monthly calculate and maintain the records of, plantwide total, monthly and 12-consecutive month rolling emissions of PM/PM₁₀.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)a. **VOC**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for Regulation 6.43:

- i. The beginning and ending date of the reporting period;
- ii. Number of operating days in the reporting period;
- iii. Identification of each exceedance of the daily VOC emission limit and the quantity of excess emissions;
- iv. Description of any corrective action taken;
- v. A negative declaration if no excess emissions occurred.

b. **PM/PM₁₀**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for PM/PM₁₀:

- i. The reporting period;
- ii. The monthly and 12-consecutive month PM/PM₁₀ emissions, plantwide, for each month in the reporting period.
- iii. Identification of all periods of exceedances of the plantwide PM/PM₁₀ emission limit including the quantity of excess emissions;
- iv. Reason for excess emissions whether process upset, control device malfunction, other known causes, or unknown causes; and
- v. Description of any corrective action taken; or
- vi. A negative declaration if there were no excess emissions.

Comments

1. The PM/PM₁₀ limit of 100 tons per year, plantwide, is a PSD avoidance limit.

2. Regulation 6.43, section 19 establishes plant-wide VOC emission limit during ozone season for this plant. Emission unit U1, U5, U6, U8, U10, U11, U16, and insignificant emission unit IA1, IA2 are subject to Regulation 6.43.
3. The owner or operator may elect to calculate the actual emissions as required by Regulation 6.43, section 19.3, or use the maximum potential emissions of an affected facility, as shown in the following table, to demonstrate compliance with the 255 lb/day plant-wide VOC emission limit.

Emission Unit	Description	PTE for VOC (lb/day)
U5	Fiberglass Repair Application	3.31
U6	Cold Solvent Parts Cleaners w/o Secondary Reservoirs	1.46
U8	Vapor Degreaser with Refrigerated Condenser	29.5
U11	Natural gas furnace and space heaters	5.47
IA1	Storage tanks	0.12
IA2	Parts washers with secondary reservoirs	0.82

4. The source accepted the 100 tons per year limit for PM/PM₁₀. Therefore 40 CFR 64, Compliance Assurance Monitoring does not apply with respect to PM/PM₁₀ emissions.

Emission Unit U1: Paint booths for coating metal and non-metal parts

U1 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19
7.08	Standards of Performance for New Process Operations	1, 2, 3.1, 3.2 and 3.3
7.25	Standards of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3, 4 and 5
7.59	Standards of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations	1, 2, 3.1, 3.1.3, 4, 5, 6 and 7
40 CFR 63 Subpart MMMM	National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products	63.3882, 63.3890, 63.3891, 63.3892, 63.3893, 63.3900, 63.3920, 63.3930, 63.3931, 63.3950, 63.3951, 63.3952

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.02	Adoption of National Emission Standards for Hazardous Air Pollutants	1, 3.95 and 4
5.14	Hazardous Air Pollutants and Source Categories	1, 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U1 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
E5	One (1) large JBI paint booth at Building C, make King Heating & Cooling, equipped with eight exhaust fans each rated at 14,000 cfm and one (1) large drying oven.	5.00, 5.01, 5.02, 5.14, 5.20, 5.21, 5.22, 5.23 6.43 7.08, 7.25, 7.59 40CFR63, Subpart MMMM	N/A	S1 - S8, S8a for drying oven
E6	One (1) medium JBI paint booth at Building C, make King Heating & Cooling, equipped with a 26,000 cfm exhaust fan and one (1) small drying oven. The small drying oven is used for both paint booth E6 and E7.			S9, S9a for drying oven
E7	One (1) small JBI paint booth at Building C, make King Heating & Cooling, equipped with a 15,000 cfm exhaust fan and one (1) small drying oven. The small drying oven is used for both paint booth E6 and E7.			S10

U1 Control Devices:

Each paint booth is equipped with dry filters.

U1 Alternative Operating Scenarios:

Emission Point	Description	Primary Operating Scenario	Alternative Operating Scenario
E5	One (1) large JBI paint booth equipped with drying oven.	Coating metal and non-metal parts with paint	Coating miscellaneous metal parts (MRAP armor kits) in each paint booth. Coating miscellaneous metal parts with Rhinocoat in E7 only.
E6	One (1) medium JBI paint booth equipped with drying oven.		
E7	One (1) small JBI paint booth equipped with drying oven.		

U1 Specific Conditions

S1. Standards (Regulation 2.16, section 4.1.1)

a. VOC

- i. The owner or operator shall not allow or cause VOC emissions from the affected facility resulting from the coating of metallic surfaces in excess of the following: (Regulation 7.59, section 2.1 and 3.1) (See Comment 2)
 - 1) 4.3 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for clear coatings.
 - 2) 3.5 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for air-dried coatings.
 - 3) 3.5 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for extreme performance coatings.
 - 4) 3.0 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for all other coatings.
- ii. The owner or operator shall determine compliance with S1.a.i based on a calendar month averaging period. (Regulation 7.59, section 3.2)
- iii. The owner or operator shall not allow or cause the total VOC emissions from all emission units subject to Regulation 7.25 to exceed 5 tons during any consecutive 12-month period, unless modeling or a BACT is submitted and approved by the District. (Regulation 7.25, section 2.1 and 3.1) (See Comment 2)

b. PM

The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr for each piece of equipment. (Regulation 7.08, section 3.1.2) (See Comment 1)

c. Opacity

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

d. TAC

- i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21) (See Comment 4)
- ii. The owner or operator shall utilize filters at all times the paint booths are

in operation and shall, to the extent practicable, maintain and operate the affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (See Comment 5)

- e. **HAP** (40 CFR 63, Subpart M MMM and Regulation 5.02)

See Appendix A, 40 CFR 63, Subpart M MMM (MACT) Specific Condition S1.

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

- i. An owner or operator of an affected facility subject to this regulation shall maintain records that include, but not be limited to, the following: (Regulation 7.25, section 2.1)
- 1) The quantity and VOC content of each coating applied on a non-metal surface; and
 - 2) The total VOC emissions for each calendar month from the surface coating of non-metal surfaces.
 - 3) The VOC emissions during each calendar month and each consecutive 12-month period.
- ii. An owner or operator of an affected facility subject to this regulation shall maintain records that include, but not be limited to, the following: (Regulation 7.59, section 6.1)
- 1) The regulation and section number applicable to the affected facility for which the records are being maintained,
 - 2) The application method and substrate type (metal, plastic, etc.),
 - 3) The amount and type of coatings (including catalyst and reducer for multicomponent coatings) and solvents (including exempt compounds) used at each point of application during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month,
 - 4) The VOC content as applied in each coating and solvent,
 - 5) The date, or usage record period, for each application of coating and solvent,

for each bypass event:

- 1) Date;
- 2) Start time and stop time;
- 3) Identification of the control device and process equipment;
- 4) Chromium III and Cobalt Emissions during the bypass in lb/hr;
- 5) Summary of the cause or reason for each bypass event;
- 6) Corrective action taken to minimize the extent or duration of the bypass event; and
- 7) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.

- e. **HAP** (40 CFR 63, Subpart Mmmm and Regulation 5.02)

See Appendix A, 40 CFR 63, Subpart Mmmm (MACT) Specific Condition S2.

S3. Reporting (Regulation 2.16, section 4.1.9.3)

a. **VOC**

- i. The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for Regulation 7.25:

- 1) Emission Unit ID number and emission point or stack ID number;
- 2) The beginning and ending date of the reporting period; and
- 3) The twelve consecutive month VOC emissions for each month of the reporting period resulting from the surface coating of non-metal parts.

- ii. The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for Regulation 7.59:

- 1) Emission unit ID number and emission point or stack ID number;
- 2) The beginning and ending date of the reporting period;
- 3) Identification of each exceedance of the coating VOC content limit and the quantity of excess emissions;
- 4) Description of any corrective action taken;
- 5) A negative declaration if no excess emissions occurred.

b. **PM**

- i. Any deviation from the requirement to perform the required monthly visual inspections of the paint booth PM filter system; and

- ii. Any deviation from the requirement to record the results of each paint booth PM filter system inspection.
- c. **Opacity**
See Specific Condition S3.b.
- d. **TAC**
 - i. Within 6 months of a change of a raw material as described in S2.d.ii, the owner or operator shall submit the re-evaluated EA demonstration to the District.
 - ii. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
 - iii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)
 - iv. The owner or operator shall report the following information regarding By-Pass Activity in the semi-annual compliance reports.
 - 1) Number of times of the by-pass activities;
 - 2) Duration of each by-pass to the atmosphere;
 - 3) Calculated pound per hour Chromium III and Cobalt emissions for each by-pass; or
 - 4) A negative declaration if no by-passes occurred.
- e. **HAP** (40 CFR 63, Subpart M MMM and Regulation 5.02)
See Appendix A, 40 CFR 63, Subpart M MMM (MACT) Specific Condition S3.

U1 Comments

- 1. Using the minimum spray gun transfer efficiency of 35%, the percent solids of the material (45.9%), and the efficiency of the filters (greater than 90%), the PM emission limit of the spray booth cannot be exceeded.

2. The metal parts surface coating operation is subject to Regulation 7.59. The VOC content standards in Condition S1.a.i only apply to metal parts coating materials.

The non-metal parts surface coating operation is subject to Regulation 7.25. The 5 tpy standard in Condition S1.a.iii only applies to non-metal parts coating operations and other units subject to Regulation 7.25.
3. Metal parts are wipe-cleaned before being coated. The wipe-down cleaners used for cleaning the metal parts are subject to Regulation 7.59.
4. BAE submitted a plantwide STAR EA Demonstration for Category 1 TAC on December 26, 2006 and July 2, 2007, and a plantwide EA Demonstration for Category 2 TAC on June 28, 2007. Based on the updated PTE calculations, all TACs emitted from paint spray booths (U1) are de minimis except for Ethylbenzene and Chromium III. Based on BAE's plantwide EA Demo and updated SCREEN3 modeling results submitted on 11/29/2011, the carcinogen risk and non-carcinogen risk values for this unit are below EA goals required in Regulation 5.21.
5. STAR EA Demonstration for Chromium III and Cobalt (MRAP coating only) was based on potential emissions controlled by dry filters. Therefore the owner or operator is required to utilize filters at all times the paint booth is in operation.
6. Based on the updated PTE for MRAP coating, the potential uncontrolled TAC emissions are de minimis for Ethylbenzene, Toluene, Xylene, and Chromium III. Only Cobalt emission is not de minimis controlled. Using SCREEN3 modeling results (4,000 acfm) from PTE 2/15/2008, the calculated noncarcinogenic risk $R_{NC} = 0.30$, which is less than EA goal (1.0).
7. This unit was previously permitted under Permit 604-08.

Emission Unit U3: Plating Shop (Building 117)**U3 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1, 2, 3 and 5
40 CFR 63, Subpart A	General Provisions	See Table 1 in 40 CFR 63, Subpart N
40 CFR 63, Subpart N	National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.	63.340, 63.341, 63.342, 63.343, 63.344, 63.345, 63.346, 63.347

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.02	Federal Emission Standards for Hazardous Air Pollutants Incorporated by Reference	1, 3.1, 3.54, 4, 5
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U3 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
PE1	Four (4) tanks* with Acid exhaust	5.00, 5.01, 5.14, 5.20, 5.21, 5.22, 5.23	N/A	S15
PE2	Seven (7) tanks* with Alkaline exhaust		N/A	S16
PE3	Ten (10) tanks* with Alkaline exhaust		C7	S17
PE4	Three (3) tanks* with Alkaline exhaust		N/A	S18
PE5	Three (3) tanks* with Cyanide exhaust		N/A	S19
PE6	Fifteen (15) tanks* with Acid exhaust		C8	S20
PE7	Ten (10) tanks* with Acid exhaust with Chromium	5.00, 5.01, 5.14, 5.20, 5.21, 5.22, 5.23, 7.08, 63 Subpart N	C9	S21
PE8	Thirteen (13) tanks* with Acid exhaust	5.00, 5.01, 5.14, 5.20, 5.21, 5.22, 5.23	N/A	S22
PE9	Eleven (11) tanks* with Cyanide exhaust		C10	S23
PE10	Fifteen (15) tanks* with Alkaline exhaust		C11	S24
PE11	Nine (9) tanks* with Chromium exhaust	5.00, 5.01, 5.14, 5.20, 5.21, 5.22, 5.23, 7.08, 63 Subpart N	C12	S25
PE12	Nine (9) tanks* with Acid exhaust	5.00, 5.01, 5.14, 5.20, 5.21, 5.22, 5.23	C13	S26
PE13	Fifty six (56) rinse tanks*		N/A	N/A

* See the following table for details of each tank:

Emission Point	TANK NO.	PROCESS	CAPACITY (GALLONS)	OPERATING TEMP. (F)
PE1	810	MURIATIC ACID PICKLE	1212	AMBIENT
	820	ZINC PHOSPHATE, LIGHT	606	205-210
	822	WARM WATER RINSE	606	120-140
	862	WARM WATER RINSE	1212	120-140
PE2	260	OIL SPRAY	909	AMBIENT
	824	PHOSPHORIC ACID PICKLE	606	150-180
	826	OIL SPRAY	606	AMBIENT
	830	HOT PAINT STRIP	1212	180-200
	832	WARM WATER RINSE	1212	120-140
	874	HARD COAT ANODIZE	1616	
	876	RINSE FOR HARD COAT ANODIZE	1616	AMBIENT
PE3	224	ALKALINE DERUST NaOH	1346	180-200
	228	ALKALINE RINSE	1346	160-180
	464	BLACK OXIDE FOR STEEL	135	240-250

Emission Point	TANK NO.	PROCESS	CAPACITY (GALLONS)	OPERATING TEMP. (F)
	600	INHIBITED ALKALINE CLEANER	1818	120-140
	800	HOT PAINT STRIP	3141	120-140
	805	WARM WATER RINSE	3141	120-140
	840	ALKALINE PAINT STRIP	303	180-200
	842	WARM WATER RINSE	303	120-140
	850	ALKALINE DERUSTER	1212	180-200
	852	COLD WATER RINSE	1212	AMBIENT
PE4	226	WARM WATER RINSE	1346	140-160
	229	WARM WATER RINSE	1346	160-180
	236	GRAIN REFINER	3231	150-180
PE5	208	HOT PAINT STRIP	1346	150-160
	230	ALKALINE DEGREASER	1346	AMBIENT
	232	WARM WATER RINSE	1346	120-140
PE6	200	PHOSPH. ACID PICKLE	1346	120-140
	204	MURIATIC ACID PICKLE	1346	AMBIENT
	209	WARM WATER RINSE	1346	120-140
	214	MANGANESE PHOSPHATE	269	210
	217	GRAIN REFINER	269	180-200
	218	MANGANESE PHOSPHATE	1346	185-195
	222	GRAIN REFINER	1346	180-190
	223	CHROMATE SEAL	3231	150-180
	520	ANODIZED STRIP	606	150-180
	650	INORGANIC SALT SEAL	269	AMBIENT
	714	PASSIVATION NITRIC NO. 4	404	70-90
	716	PASSIVATION NITRIC NO. 2	404	120-140
	720	COLD WATER RINSE	404	190-200
	722	WARM WATER RINSE	404	140
860	COPPER BRIGHT DIP	1212	AMBIENT	
PE7	238	MANGANESE PHOSPHATE	3231	190-210
	408	MURIATIC ACID PICKLE	606	AMBIENT
	506	DEOXIDIZER	606	AMBIENT
	510	ALUMINIUM DEOXIDIZER	303	AMBIENT
	512	SULFURIC ACID ANODIZE	909	60-90
	532	CHROMIC ACID ANODIZE	606	90-120
	614	CONVERSION COAT	1818	AMBIENT
	617	WARM WATER RINSE	1818	120-140
	700	NITRIC ACID DIP	303	AMBIENT
	724	DICHROMATE SEAL	404	140-160
PE8	412	CONVERSION COAT	606	AMBIENT
	416	CAD & ZINC RINSE	606	120-140
	418	ZINC PHOSPHATE	303	190-200
	424	COPPER STRIP	303	AMBIENT
	426	COLD RINSE	303	AMBIENT
	428	WATER RINSE FOR	303	AMBIENT
	460	CHROMIC ACID	303	150-180
	514	WATER RINSE FOR	909	AMBIENT
	516	DI WATER SEAL	606	200-210
	528	HARD ANODIZE	1513	45-55
	538	DICHROMATE SEAL	909	200-210
	548	NICKEL ACETATE SEAL	606	200-210
	606	DEOXIDIZER FOR ALUMINUM	1616	AMBIENT

Emission Point	TANK NO.	PROCESS	CAPACITY (GALLONS)	OPERATING TEMP. (F)
PE9	350	CYANIDE DIP	30	AMBIENT
	352	SILVER STRIKE	30	AMBIENT
	354	SILVER PLATE	30	AMBIENT
	370	ZINC PLATING	909	AMBIENT
	376	CADMIUM PLATING	606	70-90
	378	CADMIUM PLATING	909	70-90
	380	COLD WATER RINSE	1565	AMBIENT
	381	WARM WATER RINSE		
	386	COPPER STRIKE	606	100-120
	388	COPPER PLATING	606	140-150
	708	ZINCATE	303	AMBIENT
PE10	124	CHROME STRIP	606	AMBIENT
	300	ALKALINE DEGREASER	606	160-180
	302	COLD WATER RINSE	606	AMBIENT
	340	CADMIUM ZINC STRIP	606	AMBIENT
	346	TIN PLATE	404	150-190
	348	RINSE AFTER TIN	1346	AMB/140
	349	RINSE AFTER TIN		
	402	ALKALINE ELECT. CLEAN	606	180-200
	406	WARM RINSE ELECTRCLN	606	120-140
	450	BLACK OXIDE FOR COPPER	303	180-200
	502	ALKALINE ALUMINIUM CLEANER	606	120-140
	540	BLACK DYE	606	130-150
	544	WARM RINSE FOR DYE	606	140-160
	610	ALKALINE DEGREASER	1818	AMBIENT
908	CAUSTIC		AMBIENT	
PE11	102	CHROME PLATING	1615	138-142
	104	CHROME PLATING	808	138-142
	106	CHROME PLATING	808	138-142
	108	CHROME PLATING	808	138-142
	112	WARM RINSE /CHROME	673	120-140
	900	CHROME PLATE		128 - 132
	902	DRAG OUT		AMBIENT
	904	RINSE		AMBIENT
	906	ELECTROPOLISH		130 - 150
PE12	116	ELECTROPOLISH NO. 4	303	180-200
	118	SULFURIC ACID ACTIVA.	404	AMBIENT
	304	MURIATIC ACID PICKLE	606	AMBIENT
	308	SULFURIC ACID ACTIVATE	606	AMBIENT
	320	NICKEL STRIKE	606	AMBIENT
	330	ELECTROLESS NICKEL	90	185 -195
	old 330	NICKEL SULFAMATE	606	120-140
	360	NICKEL STRIP	303	AMBIENT
	366	ELECTROLESS NICKEL	90	185 -195
	367	ELECROLESS NICKEL	265	
PE13	110	RECOVERY RINSE	808	AMBIENT
	114	DEMASK AFTER CHROME	448	AMBIENT
	120	COLD WATER RINSE	1077	AMBIENT
	122	COLD WATER RINSE		
	126	COLD WATER RINSE	1885	AMBIENT
	127	COLD WATER RINSE		

Emission Point	TANK NO.	PROCESS	CAPACITY (GALLONS)	OPERATING TEMP. (F)
	201	COLD WATER RINSE	1346	AMBIENT
	205	COLD WATER RINSE	1346	AMBIENT
	215	COLD WATER RINSE	538	AMBIENT
	216	COLD WATER RINSE		
	220	COLD WATER RINSE	1346	AMBIENT
	240	COLD WATER RINSE	3231	AMBIENT
	306	COLD WATER RINSE	606	AMBIENT
	310	COLD WATER RINSE	1616	AMBIENT
	311	COLD WATER RINSE		
	322	COLD WATER RINSE	1077	AMBIENT
	323	COLD WATER RINSE		
	332	COLD WATER RINSE	1077	AMBIENT
	333	COLD WATER RINSE		
	342	CAD/ZINC STRIP RINSE	1616	AMBIENT
	343	CAD/ZINC STRIP RINSE		
	362	RINSE		AMBIENT
	363	RINSE		AMBIENT
	369	NEW WAX POT		
	372	COLD WATER RINSE	1616	AMBIENT
	373	COLD WATER RINSE		
	390	COLD WATER RINSE	1616	AMBIENT
	391	COLD WATER RINSE		
	410	COLD WATER RINSE	606	AMBIENT
	414	CAD & ZINC RINSE	606	AMBIENT
	420	RINSE FOR TANK 418	606	AMBIENT
	422	RINSE FOR TANK 418		
	452	WATER RINSE	606	AMBIENT
	454	WATER RINSE		
	462	COLD WATER RINSE	135	AMBIENT
	504	RINSE FOR ALKALN CLEAN	606	AMBIENT
	508	COLD RINSE ALUMINIUM	303	AMBIENT
	515	WATER RINSE FOR	909	AMBIENT
	521	WATER RINSE FOR	1212	AMBIENT
	522	WATER RINSE		
	530	WATER RINSE	1513	AMBIENT
	534	WATER RINSE FOR	1212	AMBIENT
	535	WATER RINSE FOR		
	542	WATER RINSE FOR DYE	606	AMBIENT
	602	COLD WATER RINSE	1818	AMBIENT
	603	COLD WATER RINSE	1818	AMBIENT
	608	ANODIC STRIP	1818	180-200
	611	COLD WATER RINSE	1818	AMBIENT
	616	COLD WATER RINSE	1818	AMBIENT
	652	COLD WATER RINSE	269	AMBIENT
	702	COLD WATER RINSE	606	AMBIENT
	704	COLD WATER RINSE		
	710	COLD WATER RINSE	606	AMBIENT
	712	COLD WATER RINSE		
	811	COLD WATER RINSE	1212	AMBIENT
	861	COLD WATER RINSE	1212	AMBIENT

U3 Control Devices:

ID	Description	Performance Indicator	Stack ID
C7	Packed bed wet scrubber (PS-1)	See Specific Condition S2.c.iii.	S17
C8	Packed bed wet scrubber (PS-2)	See Specific Condition S2.c.iii.	S20
C9	Composite Mesh System/Packed Bed Scrubber (PS-3) with HEPA Filter	Pressure drop 3.3 ± 2 " water column	S21
C10	Packed bed wet scrubber (PS-4)	See Specific Condition S2.c.iii.	S23
C11	Packed bed wet scrubber (PS-5)	See Specific Condition S2.c.iii.	S24
C12	Composite Mesh System/Packed Bed Scrubber (PS-6) with HEPA Filter	Pressure drop 2.5 ± 2 " water column	S25
C13	Packed bed wet scrubber (PS-7)	See Specific Condition S2.c.iii.	S26

U3 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. **PM**

The owner or operator shall not allow PM emissions from each piece of equipment to exceed 2.34 lb/hr. (Regulation 7.08, section 3.1.2) (See Comment 3)

b. **Opacity**

The owner or operator shall not cause to be discharged into the atmosphere any gases that may contain particulate matter that is equal to or greater than 20% opacity. (Regulation 7.08, section 3.1.1)

c. **TAC**

i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21)

ii. The owner or operator shall utilize the Packed Bed Scrubbers (PS) at all times the chrome anodizing tank and the hard chrome plating tanks are in operation and shall, to the extent practicable, maintain and operate the affected facility including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulation 5.21, section 4.7)

iii. The owner or operator shall not alter the stack heights or any other air dispersion modeling input parameters identified in the STAR Category 1 TAC EA Demonstration without prior approval by the District. (Regulation 5.01; 5.21, section 4.7; 5.23)

d. **HAP** (40 CFR 63, Subpart N and Regulation 5.02, section 4.13)

i. At all times, each owner or operator must operate and maintain the affected source subject to the requirements of this subpart, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator

(the District) which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.342(a)(1))

- ii. Each owner or operator of an affected source subject to the provisions of this subpart shall comply with these requirements in this section on and after the compliance dates specified in §63.343(a). All affected sources are regulated by applying maximum achievable control technology. (40 CFR 63.342(a)(2))
- iii. The emission limitations in this section apply during tank operation as defined in §63.341, and during periods of startup and shutdown as these are routine occurrences for affected sources subject to this subpart. In response to an action to enforce the standards set forth in this subpart, the owner or operator may assert a defense to a claim for civil penalties for violations of such standards that are caused by a malfunction, as defined in 40 CFR 63.2. Appropriate penalties may be assessed, however, if the owner or operator fails to meet the burden of proving all the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief. (40 CFR 63.342(b)(1))

To establish the affirmative defense in any action to enforce such a standard, the owner or operator must timely meet the reporting requirements of paragraph (b)(1)(ii) of this section, and must prove by a preponderance of evidence that: (40 CFR 63.342(b)(1)(i))

- 1) The violation was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal and usual manner; and could not have been prevented through careful planning, proper design or better operation and maintenance practices; and did not stem from any activity or event that could have been foreseen and avoided, or planned for; and was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and (40 CFR 63.342(b)(1)(i)(A))
- 2) Repairs were made as expeditiously as possible when exceeded violation occurred. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and (40 CFR 63.342(b)(1)(i)(B))
- 3) The frequency, amount and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and (40 CFR 63.342(b)(1)(i)(C))

- 4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and (40 CFR 63.342(b)(1)(i)(D))
 - 5) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health; and (40 CFR 63.342(b)(1)(i)(E))
 - 6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and (40 CFR 63.342(b)(1)(i)(F))
 - 7) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and (40 CFR 63.342(b)(1)(i)(G))
 - 8) At all times, the affected sources were operated in a manner consistent with good practices for minimizing emissions; and (40 CFR 63.342(b)(1)(i)(H))
 - 9) A written root cause analysis was prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using the best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction. (40 CFR 63.342(b)(1)(i)(I))
- iv. If an owner or operator is controlling a group of tanks with a common add-on air pollution control device, the emission limitations of 40 CFR 63.342(c), (d), and (e) apply whenever anyone affected source is operated. The emission limitation that applies to the group of affected sources is: (40 CFR 63.342(b)(2))
- 1) The emission limitation identified in 40 CFR 63.342(c), (d), and (e) if the affected sources are performing the same type of operation (e.g., hard chromium electroplating), are subject to the same emission limitation, and are not controlled by an add-on air pollution control device also controlling non-affected sources; (40 CFR 63.342(b)(2)(i))
 - 2) The emission limitation calculated according to 40 CFR 63.344(e)(3) if affected sources are performing the same type of operation, are subject to the same emission limitation, and are

controlled with an add-on air pollution control device that is also controlling non-affected sources; and (40 CFR 63.342(b)(2)(ii))

- 3) The emission limitation calculated according to 40 CFR 63.344(e)(4) if affected sources are performing different types of operations, or affected sources are performing the same operations but subject to different emission limitations, and are controlled with an add-on air pollution control device that may also be controlling emissions from non-affected sources. (40 CFR 63.342(b)(2)(iii))
- v. Standards for open surface hard chromium electroplating tanks: During tank operation, each owner or operator of an existing, new, or reconstructed affected source shall control chromium emissions discharged to the atmosphere from that affected source by: (40 CFR 63.342(c)(1))
- 1) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm (6.6×10^{-6} gr/dscf) for all open surface hard chromium electroplating tanks that are existing affected sources and are located at small, hard chromium electroplating facilities; (40 CFR 63.342(c)(1)(ii)) (See Comment 5)
 - 2) After the date that is 3 years after publication of this final rule in the federal register, the owner or operator of an affected open surface hard chromium electroplating tank shall not add PFOS-based fume suppressants to any affected open surface hard chromium electroplating tank. (40 CFR 63.342(c)(1)(v))
- vi. Standards for decorative chromium electroplating tanks using a chromic acid bath and chromium anodizing tanks: During tank operation, each owner or operator of an existing, new, or reconstructed affected source shall control chromium emissions discharged to the atmosphere from that affected source by either: (40 CFR 63.342(d))
- 1) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.007 mg/dscm (3.1×10^{-6} gr/dscf) for all existing decorative chromium electroplating tanks using a chromic acid bath and all existing chromium anodizing tanks; (40 CFR 63.342(d)(1))
 - 2) If a chemical fume suppressant containing a wetting agent is used, not allowing the surface tension of the electroplating or anodizing bath contained within the affected tank to exceed 40 dynes/cm (2.8×10^{-3} lbf/ft), as measured by a stalagmometer or 33 dynes/cm (2.3

- $\times 10^{-3}$ lbf/ft), as measured by a tensiometer at any time during tank operation, for all existing, new, or reconstructed decorative chromium electroplating tanks using a chromic acid bath and all existing, new, or reconstructed chromium anodizing tanks; (40 CFR 63.342(d)(3))
- 3) After the date that is 3 years after publication of this final rule in the federal register, the owner or operator of an affected decorative chromium electroplating tank or an affected chromium anodizing tank shall not add PFOS-based fume suppressants to any affected decorative chromium electroplating tank or chromium anodizing tank. (40 CFR 63.342(d)(4))
- vii. Operation and maintenance practices. All owners or operators subject to the standards in 40 CFR 63.342(c) and (d) are subject to these operation and maintenance practices. (40 CFR 63.342(f))
- 1) At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices. (40 CFR 63.342(f)(1)(i))
 - 2) Malfunctions shall be corrected as soon as practicable after their occurrence. (40 CFR 63.342(f)(1)(ii))
 - 3) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards. (40 CFR 63.342(f)(1)(iii))
 - 4) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source. (40 CFR 63.342(f)(2)(i))
 - 5) Based on the results of a determination made under 40 CFR 63.342(f)(2)(i), the Administrator may require that an owner or operator of an affected source make changes to the operation and maintenance plan required by 40 CFR 63.342(f)(3) for that source. Revisions may be required if the Administrator finds that the plan: (40 CFR 63.342(f)(2)(ii))

- (a) Does not address a malfunction that has occurred; (40 CFR 63.342(f)(2)(ii)(A))
 - (b) Fails to provide for the proper operation of the affected source, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or (40 CFR 63.342(f)(2)(ii)(B))
 - (c) Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable. (40 CFR 63.342(f)(2)(ii)(C))
- viii. Operation and maintenance plan. (40 CFR 63.342 (f)(3)) (See Comment 6)
- 1) The owner or operator of an affected source subject to paragraph (f) of this section shall prepare an operation and maintenance plan no later than the compliance date. The plan shall be incorporated by reference into the source's title V permit, if and when a title V permit is required. The plan shall include the following elements: (40 CFR 63.342 (f)(3)(i))
 - (a) The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (if such a device is used to comply with the emission limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment; (40 CFR 63.342 (f)(3)(i)(A))
 - (b) For sources using an add-on control device or monitoring equipment to comply with this subpart, the plan shall incorporate the operation and maintenance practices for that device or monitoring equipment, as identified in Table 1 of this section, if the specific equipment used is identified in Table 1 of this section; (40 CFR 63.342 (f)(3)(i)(B))
 - (c) If the specific equipment used is not identified in Table 1 of this section, the plan shall incorporate proposed operation and maintenance practices. These proposed operation and maintenance practices shall be submitted for approval as part of the submittal required under § 63.343(d); (40 CFR 63.342 (f)(3)(i)(C))
 - (d) The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor

maintenance or other preventable conditions do not occur; and (40 CFR 63.342 (f)(3)(i)(D))

- (e) The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions. (40 CFR 63.342 (f)(3)(i)(E))
 - (f) The plan shall include housekeeping procedures, as specified in Table 2 of 40 CFR 63.342.
- 2) If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events. (40 CFR 63.342 (f)(3)(ii))
 - 3) Recordkeeping associated with the operation and maintenance plan is identified in § 63.346(b). Reporting associated with the operation and maintenance plan is identified in § 63.347 (g) and (h) and paragraph (f)(3)(iv) of this section. (40 CFR 63.342 (f)(3)(iii))
 - 4) If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by 63.342 (f)(3)(i), the owner or operator shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator. (40 CFR 63.342 (f)(3)(iv))
 - 5) The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of Subpart N. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep

previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator for a period of 5 years after each revision to the plan. (40 CFR 63.342(f)(v))

- 6) To satisfy the requirements of 40 CFR 63.342(f)(3), the owner or operator may use applicable standard operating procedure (SOP) manual, Occupations Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements of this section.
- ix. The standards in this section that apply to chromic acid baths shall not be met by using a reducing agent to change the form of chromium from hexavalent to trivalent. (40 CFR 63.342(g))
- x. The following table is a summary of the work practice standards for the packed-bed scrubbers/composite mesh-pads. (40 CFR 63.342 Table 1)

Control ID	Description	Frequency
C7 and C12	1. Visually inspect to ensure proper drainage, no chromic acid buildup on the packed-beds, and no evidence of chemical attack on the structural integrity.	Quarterly
	2. Visually inspect back portion of the mesh pad closest to the fan to ensure that it is dry and no breakthrough of chromic acid mist.	Quarterly
	3. Visually inspect ductwork from tank to the control device to ensure there are no leaks.	Quarterly
	4. Add fresh makeup water to the top of the packed-bed.	Whenever makeup is needed

- xi. Small Hard Chromium Plating Facility Designation

The company requested to be classified as a Small Hard Chromium Plating Facility in a letter to the District dated 4 September 1998, therefore, the owner or operator shall comply with the following: (40 CFR 63.341)

- 1) Limit the total actual cumulative rectifier capacity to less than 60 million ampere-hours per year as determined on an annual basis.
- 2) Utilize no resettable amp-hr meters.

- 3) Maintain monthly records of the actual cumulative rectifier capacity in amp-hr. The actual cumulative rectifier capacity for each year shall be tabulated monthly by adding the capacity for the current month to the capacities for the previous 11 months.

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **PM**

There are no monitoring and record keeping requirements for this pollutant. (See Comment 3)

b. **Opacity**

- i. The owner or operator shall conduct a monthly one-minute visible emissions survey, during normal operation and daylight hours, of the emission points. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.
- ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.
- iii. The owner or operator shall maintain records, monthly, of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

c. **TAC**

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results. The owner or operator shall maintain a copy onsite of the BAE Systems STAR Category 1 TAC Environmental Acceptability Determination received December 26, 2006 and July 2, 2007 including all air dispersion modeling input parameters

and the associated EAG_C Risk, in units of risk in one million for each TAC.

- ii. If a new TAC is introduced or the content of a TAC in a raw material increases, the owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions.
 - iii. The owner or operator shall, monthly, perform and keep records of a visual inspection of the structural and mechanical integrity of the control devices for signs of damage, air leakage, corrosion, etc. and repair as needed.
 - iv. The owner or operator shall maintain daily records that identify all periods of bypassing the packed bed scrubbers (PS) while the chrome anodizing tank and the hard chrome plating tanks are in operation or a declaration entered into the records that the packed bed scrubbers operated at all times the tanks were in operation for a given day.
 - v. If there is any time that the control device is bypassed or not in operation when the process is operating, then the owner or operator shall keep a record of the following for each bypass event:
 - 1) Date;
 - 2) Start time and stop time;
 - 3) Identification of the control device and process equipment;
 - 4) TAC emissions during the bypass in lb/hr;
 - 5) Summary of the cause or reason for each bypass event;
 - 6) Corrective action taken to minimize the extent or duration of the bypass event; and
 - 7) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.
- d. **HAP** (40 CFR 63, Subpart N and Regulation 5.02, section 4.13)
- i. The owner or operator of an affected source subject to the emission limitations of this subpart shall conduct monitoring according to the type of air pollution control technique that is used to comply with the emission limitation. The monitoring required to demonstrate continuous compliance with the emission limitations is identified in 40 CFR 63.343 for the air pollution control techniques expected to be used by the owner or operator of affected sources.
 - ii. For Packed-bed scrubber systems/Composite mesh-pad systems (PS-3 and PS-6):

The owner or operator of an affected source, or group of affected sources under common control, shall monitor and record the pressure drop across the composite mesh-pad system once each day that any affected source is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ± 2 inches of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests. (40 CFR 63.343(c)(1)(ii))

- iii. The owner or operator of an affected source subject to the provisions of 40 CFR 63 Subpart N shall maintain the following records for such source: (40 CFR 63.346(b)). The owner or operator shall maintain all records for a period of five years in accordance with 40 CFR 63.10(b)(1). (40 CFR 63.346(c))
- 1) Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of 40 CFR 63.342(f) and Table 1 of 40 CFR 63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection. (40 CFR 63.346(b)(1))
 - 2) Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment, except routine housekeeping practices; (40 CFR 63.346(b)(2))
 - 3) Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control, and monitoring equipment. (40 CFR 63.346(b)(3))
 - 4) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.342(a)(1), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation; (40 CFR 63.346(b)(4))
 - 5) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by 40 CFR 63.342(f)(3). (40 CFR 63.346(b)(5))
 - 6) Test reports documenting results of all performance tests. (40 CFR 63.346(b)(6))

- 7) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance with the special compliance procedures of 40 CFR 63.344(e). (40 CFR 63.346(b)(7))
- 8) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected. (40 CFR 63.346(b)(8))
- 9) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment. (40 CFR 63.346(b)(9))
- 10) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment. (40 CFR 63.346(b)(10))
- 11) The total process operating time of the affected source during the reporting period. (40 CFR 63.346(b)(11))
- 12) Records of the actual cumulative rectifier capacity of hard chromium electroplating tanks at a facility expended during each month of the reporting period, and the total capacity expended to date for a reporting period, if the owner or operator is using the actual cumulative rectifier capacity to determine facility size in accordance with 40 CFR 63.342(c)(2) and (40 CFR 63.346(b)(12))
- 13) All documentation supporting the notifications and reports required by 40 CFR 63.9, 40 CFR 63.10, and 40 CFR 63.347. (40 CFR 63.346(b)(16))

S3. Reporting (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the MACT Periodic Reports, Semiannual Reports, and all other required reports. If no deviations occur in a reporting period, the owner or operator shall report a negative declaration for the following:

- a. **PM**

There are no compliance reporting requirements for this pollutant. (See Comment 3)

b. Opacity

- i. Any deviation from the requirement to perform visible emission surveys or Method 9 tests;
- ii. Any deviation from the requirement to record the results of each visible emissions survey and Method 9 test performed;
- iii. The number, date, and time of each visible emission survey where visible emissions were observed and the results of the Method 9 test performed;
- iv. Identification of all periods of exceeding the opacity standard; and
- v. Description of any corrective action taken for each exceedance of the opacity standard.

c. TAC

The owner or operator shall submit notification to, and receive approval by, the District for the following:

- i. Within 6 months of a change of a raw material as described in S2.d.ii, the owner or operator shall submit the re-evaluated EA demonstration to the District.
- ii. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- iii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)
- iv. Identification of all periods of bypassing the packed bed scrubbers while the chrome anodizing tank and the hard chrome plating tanks were in operation during a reporting period. The owner or operator shall report the following information regarding By-Pass Activity in the semi-annual compliance reports:
 - 1) The date;
 - 2) Number of times the vent stream by-passes the control device and is vented to the atmosphere;

- 3) Duration of each by-pass to the atmosphere;
- 4) Calculated pound per hour emissions for each by-pass; or
- 5) If there are no periods of bypassing the packed bed scrubbers during a reporting period, the owner or operator shall submit a negative declaration for the reporting period.

d. **HAP** (40 CFR 63, Subpart N and Regulation 5.02, section 4.13)

The owner or operator shall comply with the reporting requirements pursuant to 40 CFR 63.347.

- i. The owner or operator of each affected source subject to these standards shall fulfill all reporting requirements outlined in this section and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of this subpart. These reports shall be made to the Administrator at the appropriate address as identified in §63.13 or to the delegated State authority. (40 CFR 63.347(a))
 - 1) Reports required by subpart A of this part and this section may be sent by U.S. mail, fax, or by another courier. (40 CFR 63.347(a)(1))
 - (a) Submittals sent by U.S. mail shall be postmarked on or before the specified date. (40 CFR 63.347(a)(1)(i))
 - (b) Submittals sent by other methods shall be received by the Administrator on or before the specified date. (40 CFR 63.347(a)(1)(ii))
 - 2) If acceptable to both the Administrator and the owner or operator of an affected source, reports may be submitted on electronic media. (40 CFR 63.347(a)(2))
- ii. The reporting requirements of this section apply to the owner or operator of an affected source when such source becomes subject to the provisions of this subpart. (40 CFR 63.347(b))
- iii. The owner or operator shall submit the Notification of Compliance Status each time that an affected source becomes subject to the requirements of this subpart. (40 CFR 63.347(e)(1)) (See Comment 2)
- iv. The owner or operator of an affected source for which compliance monitoring is required in accordance with 40 CFR 63.343(c) shall prepare a summary report to document the ongoing compliance status of the source. The report must contain the following information: (40 CFR 63.347(g)(3))

- 1) The company name and address of the affected source; (40 CFR 63.347(g)(3)(i))
- 2) An identification of the operating parameter that is monitored for compliance determination, as required by 40 CFR 63.343(c); (40 CFR 63.347(g)(3)(ii))
- 3) The relevant emission limitation for the affected source, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation as specified in the notification of compliance status required by 40 CFR 63.347(e); (40 CFR 63.347(g)(3)(iii))
- 4) The beginning and ending dates of the reporting period; (40 CFR 63.347(g)(3)(iv))
- 5) A description of the type of process performed in the affected source; (40 CFR 63.347(g)(3)(v))
- 6) The total operating time of the affected source during the reporting period; (40 CFR 63.347(g)(3)(vi))
- 7) If the affected source is a hard chromium electroplating tank and the owner or operator is limiting the maximum cumulative rectifier capacity in accordance with 40 CFR 63.342(c)(2), the actual cumulative rectifier capacity expended during the reporting period, on a month-by-month basis; (40 CFR 63.347(g)(3)(vii))
- 8) A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes; (40 CFR 63.347(g)(3)(viii))
- 9) A certification by a responsible official, as defined in 40 CFR 63.2, that the work practice standards in 40 CFR 63.342(f) were followed in accordance with the operation and maintenance plan for the source; (40 CFR 63.347(g)(3)(ix))
- 10) If the operation and maintenance plan required by 40 CFR 63.342(f)(3) was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess

emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the report(s) required by 40 CFR 63.342(f)(3)(iv) documenting that the operation and maintenance plan was not followed; (40 CFR 63.347(g)(3)(x))

- 11) A description of any changes in monitoring, processes, or controls since the last reporting period; (40 CFR 63.347(g)(3)(xi))
 - 12) The number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.342(a)(1), including actions taken to correct a malfunction. (40 CFR 63.347(g)(3)(xii))
 - 13) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and (40 CFR 63.347(g)(3)(xiii))
 - 14) The date of the report. (40 CFR 63.347(g)(3)(xiv))
- v. Report. The owner or operator seeking to assert an affirmative defense shall submit a written report to the Administrator with all necessary supporting documentation, that it has met the requirements set forth in paragraph (i) of this section. This affirmative defense report shall be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmation defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard. (40 CFR 63.342(b)(1)(ii))

S4. Testing (Regulation 2.16, section 4.1.9.3)

The owner or operator shall construct all equipment in such a manner that the following testing requirements can be performed.

HAP

- i. The owner or operator shall, within 10 years after the previous performance tests, conduct subsequent stack tests using an EPA Reference Method 306 Chromium performance test within +/- 10% of maximum

production on the outlet stream of each of the control device system (after the HEPA filter). (See Comment 5)

- ii. The owner or operator shall perform a capture efficiency test using EPA guidelines.
- iii. The owner or operator shall submit a written compliance test plan that includes the EPA test methods that will be used for compliance testing, the process operating parameters that will be monitored during the compliance test, and the control device performance indicators (e.g. pressure drop) that will be monitored during the compliance test. The compliance test plan shall be furnished to the District at least 30 days prior to the actual date of the compliance test. Attached to the permit is a Protocol Checklist for Performance Test for the information to be submitted in the protocol.
- iv. The owner or operator shall provide the District at least 10 days prior notice of any compliance test to afford the District the opportunity to have an observer present.
- v. The owner or operator shall furnish the District with a written report of the results of the compliance test within 60 days following the actual date of the compliance test.
- vi. The owner or operator shall provide written notification to the District of the actual date of initial startup. The written notification shall be postmarked within 15 days after the startup date.

U3 Comments

1. BAE submitted a plantwide STAR EA Demonstration for Category 1 TAC on December 26, 2006 and July 2, 2007, and a plantwide EA Demonstration for Category 2 TAC on June 28, 2007. It was demonstrated that TAC emissions from this unit are de minimis except Chromium VI. In the 2007 Category 1 EA Demo, BAE calculated carcinogenic and non-carcinogenic risk values for Chromium VI based on the Method 306 stack test conducted on 11/13/2006 and using SCREEN3 modeling. The District re-calculated the risk values for Chromium VI, Cadmium, Manganese, and Nickel using SCREEN3 model results from 2007 EA Demo and applied Chromium VI emission factors from recent stack test conducted on April 13-14, 2009, other TAC emission factor from updated PTE. The carcinogenic risk and non-carcinogenic risk for all TACs are below EA Goals for both industrial and non-industrial property with utilizing the packed bed scrubbers.

		Industrial		Non-Industrial	
TAC Name	CAS No.	R _C	R _{NC}	R _C	R _{NC}
Cadmium	7440-43-9	0.002	4.4E-05	0.001	3.2E-05

		Industrial		Non-Industrial	
TAC Name	CAS No.	R _C	R _{NC}	R _C	R _{NC}
Manganese	7439-96-5		3.8E-04		2.7E-04
Nickel	7440-02-0	0.055	4.2E-03	0.039	3.0E-03
Chromium (6+)	7440-47-3	0.47	4.9E-03	0.30	3.2E-03

2. BAE Systems submitted an Initial Notification Report and a Notification of Compliance Status on January 25, 1997.
3. The District has determined that the PM emissions from this unit cannot exceed the PM standard under Regulation 7.08 uncontrolled. Therefore there are no monitoring, record keeping, and reporting requirements with respect to PM emissions.
4. On December 9, 2008, BAE Systems submitted a written notification for the initial startup of the HEPA filters. Compliance with the requirement of startup notification has been met.
5. Performance tests for PM, Opacity, and HAP were required by construction permit 435-08 and operating permit 618-08 for the two HEPA filters for PS-3 and PS-6 no later than June 30, 2009 using an EPA Reference Method 306. BAE Systems performed the required tests for PM, Opacity, and HAP on April 16 and 17, 2009. According to the stack test, the controlled PM emissions from this unit are in compliance with the lbs/hr limit for PM; the chromium emissions are in compliance with the new mg/dscm limits in 40 CFR 63, Subpart N finalized on August 15, 2012.
6. The owner or operator of the affected source prepared and submitted an operation and maintenance plan to the District on December 4, 2008.
7. The owner or operator conducted the initial performance test from June 13 through June 26, 1993 for the plating facility. The stack test results demonstrated compliance with the chromium emission standard specified in 40 CFR Part 63, Subpart N.
8. This unit was previously permitted by Permit 606-08, 618-08, 435-08, and 733-08.

Emission Unit U5: Fiberglass Repair Application**U5 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19
7.25	Standards of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3.2, 3.3, 4.1, 4.2, 5.1 and 5.2

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.14	Hazardous Air Pollutants and Source Categories	1, 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U5 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
E32	One (1) fiberglass repair application	5.00, 5.01, 5.14, 5.20, 5.21, 5.22, 5.23, 6.43, 7.25	N/A	N/A

U5 Control Device:

There are no control devices associated with this unit.

U5 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. VOC**

The owner or operator shall not allow or cause the total VOC emissions, including all coatings, additives, catalysts, solvents, thinners, and cleaners from all emission units subject to Regulation 7.25 to equal or exceed 5 tons during any consecutive 12-month period, unless a BACT is submitted and approved by the District. (Regulation 7.25, section 2.1 and 3.1)

b. TAC

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. VOC

An owner or operator of an affected facility subject to this regulation shall maintain records that include, but not be limited to, the following: (Regulation 7.25, section 2.1)

- i. The quantity of each coating applied during each calendar month;
- ii. The owner or operator shall monthly calculate and record the monthly and twelve consecutive month period totals of VOC emissions for each calendar month.

b. TAC

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. If a new TAC is introduced or the content of a TAC in a raw material increases, the owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions.

S3. Reporting (Regulation 2.16, section 4.1.9.3)**a. VOC**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for Regulation 7.25:

- i. Emission Unit ID number;
- ii. The beginning and ending date of the reporting period; and
- iii. The monthly and twelve consecutive month VOC emissions for each month of the reporting period.

b. TAC

- i. Within 6 months of a change of a raw material as described in S2.d.ii, the owner or operator shall submit the re-evaluated EA demonstration to the District.
- ii. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- iii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)

U5 Comments

1. The potential uncontrolled TAC emissions from this unit have been determined by the District to be de minimis based on PTE evaluation.
2. This unit was previously permitted under Permit 608-08.

Emission Unit U6: Cold Solvent Parts Cleaners without Secondary Reservoirs

U6 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.18	Standards of Performance for Solvent Metal Cleaning Equipment	1 through 4
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19

U6 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
E33a	One (1) cold solvent parts cleaners without secondary reservoirs.	6.18, 6.43	N/A	N/A
E33f	One (1) cold solvent parts cleaners without secondary reservoirs.			

U6 Control Devices:

There are no control devices associated with this unit.

U6 Specific Conditions

S1. Standards (Regulation 2.16, section 4.1.1)

VOC

- i. The owner or operator shall install, maintain, and operate the control equipment as follows: (Regulation 6.18, section 4)
 - 1) The cold cleaner shall be equipped with a tightly fitting cover that is free of cracks, holes, or other defects. If the solvent is agitated or heated, then the cover shall be designed so that it can be easily operated with 1 hand. (Regulation 6.18, section 4.1.1)
 - 2) The cold cleaner shall be equipped with a drainage facility that is designed so that the solvent that drains off parts removed from the cleaner will return to the cold cleaner. The drainage facility may be external if the District determines that an internal type cannot fit into the cleaning system. (Regulation 6.18, section 4.1.2)
 - 3) A permanent, conspicuous label summarizing the operating requirements specified in Specific Condition 1.b. shall be installed on or near the cold cleaner. (Regulation 6.18, section 4.1.3)
 - 4) If used, the solvent spray shall be a fluid stream, not a fine, atomized, or shower type spray, at a pressure that does not cause excessive splashing. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaner. Solvent flow shall be directed downward to avoid turbulence at the air-solvent interface and to prevent solvent from splashing outside of the cold cleaner. (Regulation 6.18, section 4.1.4)
 - 5) Work area fans shall be located and positioned so that they do not blow across the opening of the cold cleaner. (Regulation 6.18, section 4.1.6)
 - 6) If a pump-agitated solvent bath is used, then the agitator shall be operated to produce no more than a rolling motion of solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned. An air-agitated solvent bath shall not be used. (Regulation 6.18, section 4.1.7)
 - 7) The solvent-containing portion of the cold cleaner shall be free of all liquid leaks. Auxiliary cold cleaner equipment such as pumps, water separators, steam traps, or distillation units shall not have

any visible liquid leaks, visible tears, or cracks. (Regulation 6.18, section 4.1.8)

- ii. The owner or operator shall observe at all times the following operating requirements: (Regulation 6.18, section 4.2)
 - 1) Waste solvent shall neither be disposed of nor transferred to another party in a manner such that more than 20% by weight of the waste solvent can evaporate. Waste solvent shall be stored only in a covered container. A covered container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container. (Regulation 6.18, section 4.2.1)
 - 2) The solvent level in the cold cleaner shall not exceed the fill line. (Regulation 6.18, section 4.2.2)
 - 3) The cold cleaner cover shall be closed whenever a part is not being handled in the cold cleaner. (Regulation 6.18, section 4.2.3)
 - 4) Parts to be cleaned shall be racked or placed into the cold cleaner in a manner that will minimize drag-out losses. (Regulation 6.18, section 4.2.4)
 - 5) Cleaned parts shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping, or rotating, the parts shall be positioned so that the solvent drains directly back to the cold cleaner. (Regulation 6.18, section 4.2.5)
 - 6) A spill during solvent transfer shall be cleaned immediately, and the wipe rags or other sorbent material shall be immediately stored in a covered container for disposal or recycling, unless enclosed storage of these items is not allowed by fire protection authorities. (Regulation 6.18, section 4.2.6)
 - 7) Sponges, fabric, wood, leather, paper products, and other absorbent material shall not be cleaned in a cold cleaner. (Regulation 6.18, section 4.2.7)
- iii. The owner or operator shall not operate a cold cleaner using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F). (Regulation 6.18, section 4.3.2)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

VOC

The owner or operator shall maintain records that include the following for each purchase: (Regulation 6.18, section 4.4.2)

- i. The name and address of the solvent supplier,
- ii. The date of the purchase,
- iii. The type of the solvent, and
- iv. The vapor pressure of the solvent measured in mm Hg at 20°C (68°F).

S3. Reporting (Regulation 2.16, section 4.1.9.3)

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance reports:

VOC

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for Regulation 6.18:

- i. Emission Unit ID number and emission point ID number;
- ii. The beginning and ending date of the reporting period;
- iii. Identification of applicable equipment standard or record;
- iv. Identification of all periods of exceeding a VOC emission limit or standard specified in this permit, including the quantity of excess emissions.
- v. A declaration that if the equipment standard or record is being maintained.

U6 Comments

1. Based on PTE calculations for this unit, the VOC potential emissions 1.46 lb/day may be used to comply with Regulation 6.43 Section 19.
2. This unit was previously permitted under Permit 609-08. Cold solvent parts cleaners equipped with secondary reservoirs are determined to be insignificant activities per Regulation 2.02, section 2.3.22.

Emission Unit U8: Vapor Degreaser with Refrigerated Condenser**U8 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.18	Standards of Performance for Solvent Metal Cleaning Equipment	1, 2, 3, 5
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.14	Hazardous Air Pollutants and Source Categories	1, 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U8 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
E35	One (1) 30 gallon vapor degreaser with refrigerated condenser for cleaning metal parts, make Branson, model WSD-1216W, capacity 22 gallons.	5.00, 5.01, 5.14, 5.20, 5.21, 5.22, 5.23 6.18, 6.43	C35	N/A

U8 Control Devices:

ID	Description	Performance Indicator	Stack ID
C35	One (1) refrigerated condenser	See Specific Condition S2.a.	N/A

U8 Specific Conditions

S1. Standards (Regulation 2.16, section 4.1.1)

a. VOC

- i. The open top vapor degreaser shall be equipped with a cover that can be opened and closed easily without disturbing the vapor zone. The cover shall be free of cracks, holes, and other defects. If the degreaser opening is greater than 10 square feet, the cover must be powered. If a lip exhaust is used, the closed cover shall be below the level of the lip exhaust. (Regulation 6.18, section 5.1.1)
- ii. The open top vapor degreaser shall be equipped with the following safety switches: (Regulation 6.18, section 5.1.2)
 - 1) Condenser flow switch and thermostat to shut off the sump heater if the condenser coolant either is not circulation or is too warm; (Regulation 6.18, section 5.1.2.1)
 - 2) Spray safety switch to shut off the spray pump if the vapor level drops more than 4 inches below the bottom condenser coil in order to prevent spraying above the vapor level, and (Regulation 6.18, section 5.1.2.2)
 - 3) Vapor level control thermostat to shut off the sump heater if the vapor zone rises above the design level, or (Regulation 6.18, section 5.1.2.3)
 - 4) Equivalent safety systems as approved on a case-by-case basis by the District. (Regulation 6.18, section 5.1.2.4)
- iii. The open top vapor degreaser shall be equipped with a major control device; a refrigerated chiller. (Regulation 6.18, section 5.1.3.2)
- iv. A permanent, conspicuous label summarizing the operating procedures specified in section 5.1.2 of Regulation 6.18, shall be installed on or near the open top vapor degreaser. (Regulation 6.18, section 5.1.4)
- v. The cover shall be closed at all times except when processing workloads through the open top vapor degreaser. (Regulation 6.18, section 5.2.1)
- vi. Solvent carry-out shall be minimized by the following measures: (Regulation 6.18, section 5.2.2)
 - 1) Parts shall be racked to allow complete drainage, (Regulation 6.18, section 5.2.2.1)
 - 2) Parts shall be moved in and out of the open top vapor degreaser at a vertical speed of less than 11 ft/min, (Regulation 6.18, section 5.2.2.2)

- 3) The work load shall be decreased in the vapor zone until condensation ceases, (Regulation 6.18, section 5.2.2.3)
 - 4) Any pools of solvent on the cleaned parts shall be tipped out before removal, and (Regulation 6.18, section 5.2.2.4)
 - 5) Parts shall be allowed to dry with the open top vapor degreaser above the vapor zone until visually dry. (Regulation 6.18, section 5.2.2.5)
- vii. Porous or absorbent materials such as cloth, leather, wood, or rope shall not be degreased. (Regulation 6.18, section 5.3)
 - viii. The work load shall not occupy more than half of the degreaser's open top area. (Regulation 6.18, section 5.4)
 - ix. The vapor level shall not drop more than 4 inches when the work load enters or leaves the vapor level. (Regulation 6.18, section 5.5)
 - x. Solvent shall not be sprayed above the vapor level. (Regulation 6.18, section 5.6)
 - xi. Any solvent leak shall either be repaired immediately or the open top vapor degreaser shall be shut down until the leak is repaired. (Regulation 6.18, section 5.7)
 - xii. Waste solvent shall neither be disposed of nor transferred to another party in a manner such that more than 20% by weight of the wasted solvent can evaporate. Waste solvent shall be stored only in closed containers. (Regulation 6.18, section 5.8)
 - xiii. The exhaust ventilation shall not exceed 65 cfm/sq ft of degreaser area unless necessary to meet OSHA requirements or control device requirements. Ventilation fans shall not be used near the degreaser opening. (Regulation 6.18, section 5.9)
 - xiv. Water shall not be visually detectable in the solvent exiting the water separator. (Regulation 6.18, section 5.10)
 - xv. The owner or operator shall operate and maintain the condenser at all times the vapor degreaser is in operation.

b. TAC

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. VOC

- i. The owner or operator shall maintain monthly records that identify all periods of operation the vapor degreaser with the condenser offline. The records shall include summary information on the cause and duration of each offline event, calculations that show the emissions during each offline event, description of the corrective action take for each event and measures implemented to prevent recurrence of the situation that resulted in operating the vapor degreaser without the condenser in operating of the total volatile organic materials throughput for each operating day.
- ii. The owner or operator shall, monthly, perform and keep records of a visual inspection of the structural and mechanical integrity of the control devices for signs of damage, air leakage, corrosion, etc. and repair as needed.

b. TAC

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. If a new TAC is introduced or the content of a TAC in a raw material increases, the owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions.

S3. Reporting (Regulation 2.16, section 4.1.9.3)**a. VOC**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for VOC:

- i. The company name;
- ii. The beginning and ending date of the reporting period;
- iii. Identification of all periods when the condenser was offline while the vapor degreaser was in operation, including the emissions during each offline event;
- iv. Summary information on the cause and duration of each condenser offline event; and

- v. Description of the corrective action taken for each offline event and measure implemented to prevent recurrence of the situation that resulted in operating the vapor degreaser while the condenser was not in operation.
- b. **TAC**
- i. Within 6 months of a change of a raw material as described in S2.d.ii, the owner or operator shall submit the re-evaluated EA demonstration to the District.
 - ii. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
 - iii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)

U8 Comments

1. The potential uncontrolled VOC emissions from this emission unit are 5.37 tons per year based on the AP-42 emission factor of 0.15 lb/hr/ft², a surface area of 8.188 ft², and operating 8760 hr/yr. The vapor degreaser has a freeboard ratio of 0.75 and utilizes a surface condenser to reduce VOC emissions.
2. This vapor degreaser is not subject to 40 CFR 63 Subpart T, National Emission Standards for Halogenated Solvent Cleaning, because it uses non-halogenated solvents.
3. The potential uncontrolled TAC emissions from this unit have been determined by the District to be de minimis based on PTE evaluation.
4. This unit was previously permitted under Construction Permit 366-05 and Operating Permit 611-08 (vapor degreaser) and 734-08 (refrigerated condenser).

Emission Unit U10: Spray Coating Operation for Adhesive and Fire Retardant

U10 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19
7.08	Standards of Performance for New Process Operations	1, 2, 3.1, 3.2 and 3.3
7.25	Standards of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3, 4 and 5

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.14	Hazardous Air Pollutants and Source Categories	1, 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U10 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
E37	One (1) spray coating operation for the application of adhesive and fire retardant to the interior of gun shields.	5.00, 5.01, 5.14, 5.20, 5.21, 5.22, 5.23, 6.43 7.08, 7.25	N/A	S34

U10 Control Devices:

This unit has dry filters.

U10 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. VOC**

The owner or operator shall not allow or cause *total* VOC emissions from all emission units subject to Regulation 7.25 to exceed 5 tons during any consecutive 12-month period, unless modeling or a BACT is submitted and approved by the District. (Regulation 7.25, section 2.1 and 3.1) (See Comment 1)

b. Opacity

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

c. PM

The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr. (Regulation 7.08, section 3.1.2) (See Comment 2)

d. TAC

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. VOC

An owner or operator of an affected facility subject to this regulation shall maintain records that include, the following: (Regulation 7.25, section 2.1)

- i. The quantity and VOC content of each coating applied on a non-metal surface, the usage record period shall not exceed 1 calendar month; and
- ii. The total VOC emissions for each calendar month from the surface coating of non-metal surfaces.
- iii. The VOC emissions during each calendar month and each consecutive 12-month period.

b. Opacity

- i. The owner or operator shall inspect the filters in the paint booth(s) at least monthly to ensure proper installment (i.e. proper alignment/placement, gaps, etc.) and replace as needed.
 - ii. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if filters were replaced.
 - c. **PM**

See Specific Condition S2.b.
 - d. **TAC**
 - i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
 - ii. If a new TAC is introduced or the content of a TAC in a raw material increases, the owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions.
- S3. **Reporting** (Regulation 2.16, section 4.1.9.3)
 - a. **VOC**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for Regulation 7.25:
 - i. Emission Unit ID number;
 - ii. The beginning and ending date of the reporting period; and
 - iii. The twelve consecutive month VOC emissions for each month of the reporting period resulting from the surface coating of non-metal parts.
 - b. **Opacity**
 - i. The date, duration (including the start and stop time) of each time the filters are damaged or not utilized while the process is in operation,
 - ii. The number of filters damaged,
 - iii. Corrective action taken,
 - iv. Summary information on the cause or reason for missing or damaged filters and measures implemented to prevent reoccurrence of the situation that damaged or missing filters.
 - v. A negative declaration if no deviations occurred.
 - c. **PM**

There are no compliance reporting requirements for this equipment.

d. TAC

- i. Within 6 months of a change of a raw material as described in S2.d.ii, the owner or operator shall submit the re-evaluated EA demonstration to the District.
- ii. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- iii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)

U10 Comments

1. The adhesive is applied to metal parts and the fire retardant is applied to non-metal parts. Since the adhesive does not contain any VOC or HAP, only the fire retardant contains VOC, this unit is subject to Regulation 7.25 only but not subject to Regulation 7.59.
2. Using the minimum spray gun transfer efficiency of 35%, the percent solids of the material, and the efficiency of the filters (greater than 90%), the PM emission limit of the spray booth cannot be exceeded.
3. This unit is not subject to 40 CFR 63, Subpart M MMM since the coatings and solvents used for the operation do not contain any HAP. The owner or operator shall keep a record of the MSDS for each raw material. The owner or operator shall submit notification to the District for approval of any raw material change.
4. The potential uncontrolled TAC emissions from this unit have been determined by the District to be de minimis based on PTE evaluation.
5. This unit was previously permitted under Construction Permit 458-08 and Operating Permit 613-08. On January 10, 2013, BAE Systems submitted a notification of relocating this unit from the south end of building C to the north end of the same building, effective January 25, 2013. No permit is required since there are no emission increases due to relocation of this unit.

Emission Unit U11: Natural gas furnace and space heaters

U11 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19
7.06	Standards of Performance for New Indirect Heat Exchangers	1, 2, 3, 4.1.3, 4.2, 5.1.1 and 8

U11 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
E38	Natural gas-fired heating equipment, including furnaces, heaters, air make-up units, and/or small NG-fired boilers, each unit < 10.0 MM Btu/hr heat input capacity and with a cumulative site limit of 42.0 MM Btu/hr.	6.43 7.06	N/A	N/A

U11 Control Devices:

There are no control devices associated with Emission Unit U11.

U11 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. SO₂**

The owner or operator shall not cause to be discharged into the atmosphere from that affected facility any gases which contain sulfur dioxide in excess of 1.0 pounds per million BTU actual total heat input for combustion of liquid and gaseous fuels. (Regulation 7.06, section 5.1.1) (See Comment 1)

b. PM

The owner or operator shall not cause to be discharged into the atmosphere from that affected facility particulate matter in excess of 0.28 pounds per million BTU actual total heat input. (Regulation 7.06, section 4.1.4) (See Comment 1)

c. Opacity

The owner or operator shall not cause to be discharged into the atmosphere from the affected facility particulate matter emissions which exhibit greater than 20% opacity. (Regulation 7.06, section 4.1.4) (See Comment 2)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. SO₂

There are no monitoring or record keeping requirements for SO₂ compliance. (See Comment 1)

b. PM

There are no monitoring or record keeping requirements for PM compliance. (See Comment 1)

c. Opacity

There are no monitoring or record keeping requirements for Opacity compliance. (See Comment 2)

S3. Reporting (Regulation 2.16, section 4.1.9.3)**a. SO₂**

There are no routine compliance reporting requirements for this equipment.

b. **PM**

There are no routine compliance reporting requirements for this equipment.

c. **Opacity**

There are no routine compliance reporting requirements for this equipment.

U11 Comments

1. One-time PM and SO₂ compliance demonstrations have been performed, using AP-42 emission factors and combusting natural gas, and the emission standards cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements for this equipment with respect to PM and SO₂ emission limits.
2. The District has determined that using a natural gas fired boiler will inherently meet the 20% opacity standard. Therefore, the company is not required to perform periodic monitoring to demonstrate compliance with the opacity standard.
3. The TAC emissions from the combustion of natural gas are considered to be “de minimis emissions” by the District. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include the other emissions from a process or process equipment that are not the products of the combustion of natural gas. (Regulation 5.01, section 1.6.7)
4. The furnaces, heaters, air make-up units, and boilers under this unit meet the definition of insignificant activities per Regulation 2.16, section 1.23. However, Regulation 7.06 applies to each indirect heat exchangers having input capacity of more than 1.0 MMBtu/hr. These heat exchangers shall meet the requirements under Regulation 7.06.
5. This unit was previously permitted under Construction Permit 440-08 and Operating Permit 614-08.

Emission Unit U12: Shot blast cabinets**U12 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1, 2, 3.1, 3.2 and 3.3

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.14	Hazardous Air Pollutants and Source Categories	1, 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U12 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
E39a	One (1) glass bead shot blast cabinet, make Empire, model MH-36485, rated at 50 lb/hr, located at Hut 51 west wall.	5.00, 5.01, 5.14, 5.20, 5.21, 5.22, 5.23, 7.08	C39a	N/A
E39b	One (1) aluminum oxide shot blast cabinet, make Vacublast, model MK 11-P, rated at 50 lb/hr, located in Building 117 east wall blast room.		C39b	N/A
E39e	One (1) plastic shot blast cabinet, make Universal, model 72DDH-DC200, rated at 50 lb/hr, located at Hut 51 east wall.		C39e	N/A

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
E43	One (1) blasting cabinet, make Cycloblast Dry Honer, model 4836-F, rated at 100 lb/hr, located in the north end of Building B.	5.00, 5.01, 5.14, 5.20, 5.21, 5.22, 5.23, 7.08	C43	N/A

U12 Control Device:

Each blast cabinet is equipped with an array of filter panels, designated as C39a, C39b, C39e, and C43.

U12 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. PM**

The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr from each shot blast cabinet. (Regulation 7.08, section 3.1.2) (See Comment 1 and 2)

b. Opacity

The owner or operator shall not cause to be discharged into the atmosphere any gases that may contain particulate matter that is equal to or greater than 20% opacity. (Regulation 7.08, section 3.1.1)

c. TAC

i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21)

ii. The owner or operator shall utilize control devices at all times the blast cabinets are in operation and shall, to the extent practicable, maintain and operate the affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (See Comment 2)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. PM

i. The owner or operator shall, monthly, perform a visual inspection of the structural and mechanical integrity of the dust collector for signs if damage, air leakage, corrosion, etc. and repair as needed.

ii. The owner or operator shall keep records, monthly, of the visual inspection of the structural and mechanical integrity of the dust collector.

b. Opacity

i. The owner or operator shall conduct a monthly one-minute visible emissions survey, during normal operation and daylight hours, of the

emission points. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.

- ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.
- iii. The owner or operator shall maintain records, monthly, of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

c. **TAC**

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. If a new TAC is introduced or the content of a TAC in a raw material increases, the owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions.
- iii. The owner or operator shall maintain daily records of any periods of time where the blast cabinets were operating without filters or a declaration that the filters were operated at all times that day when the blast cabinets operating.
- iv. If there is any time that the filters are bypassed when the blast cabinets are operating, then the owner or operator shall keep a record of the following for each bypass event:
 - 1) Date;
 - 2) Start time and stop time;
 - 3) Identification of the control device and process equipment;
 - 4) Chromium VI Emissions during the bypass in lb/hr;
 - 5) Summary of the cause or reason for each bypass event;
 - 6) Corrective action taken to minimize the extent or duration of the bypass event; and

- 7) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

a. **PM**

The owner or operator shall report any deviation from the requirement of performing a monthly visual inspection of the structural and mechanical integrity of the filters.

b. **Opacity**

- i. Any deviation from the requirement to perform visible emission surveys or Method 9 tests;
- ii. Any deviation from the requirement to record the results of each visible emissions survey and Method 9 test performed;
- iii. The number, date, and time of each visible emission survey where visible emissions were observed and the results of the Method 9 test performed;
- iv. Identification of all periods of exceeding the opacity standard; and
- v. Description of any corrective action taken for each exceedance of the opacity standard.

c. **TAC**

- i. Within 6 months of a change of a raw material as described in S2.d.ii, the owner or operator shall submit the re-evaluated EA demonstration to the District.
- ii. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- iii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)
- iv. The owner or operator shall report the following information regarding By-Pass Activity in the semi-annual compliance reports.
 - 1) Number of times of the by-pass activities;

- 2) Duration of each by-pass to the atmosphere;
- 3) Calculated pound per hour Chromium VI emissions for each by-pass; or
- 4) A negative declaration if no by-passes occurred.

U12 Comments

1. The potential uncontrolled PM emissions from shot blast cabinets E39a, E39b, and E39e cannot exceed the standard from Regulation 7.08. The potential PM emissions from shot blast cabinets E43 can exceed the standard uncontrolled, but cannot exceed the standard controlled.
2. Based on PTE calculation, lead emissions and chromium III from each blast cabinet are de minimis uncontrolled, chromium VI emissions are de minimis controlled, but not de minimis uncontrolled. Therefore the permit will require the control device for each blast cabinet to be operated at all times in order to comply with the STAR program. Compliance with STAR Program will ensure compliance with PM standards from Regulation 7.08. There are no additional requirements for PM standards compliance.
3. This unit was previously permitted under Construction Permit 438-08, 28-10-C, and Operating Permit 735-08.

Emission Unit U16: JBI spray booth for coating miscellaneous metal parts**U16 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19
7.08	Standards of Performance for New Process Operations	1, 2, 3.1, 3.2 and 3.3
7.59	Standards of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations	1, 2, 3.1, 3.1.3, 4, 5, 6 and 7
40 CFR 63 Subpart MMMM	National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products	63.3882, 63.3890, 63.3891, 63.3892, 63.3893, 63.3900, 63.3920, 63.3930, 63.3931, 63.3950, 63.3951, 63.3952

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.02	Adoption of National Emission Standards for Hazardous Air Pollutants	1, 3.95 and 4
5.14	Hazardous Air Pollutants and Source Categories	1, 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U16 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
E44	One (1) front air flow spray booth, make JBI, model T-25-WSB-S, for coating miscellaneous metal parts.	5.00, 5.01, 5.02, 5.14, 5.20, 5.21, 5.22, 5.23 6.43 7.08, 7.59 40CFR63, Subpart M MMM	N/A	S32

U16 Control Devices:

This booth has a stack exhaust and dry filters.

U16 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. VOC**

i. The owner or operator shall not allow or cause VOC emissions from the affected facility resulting from the coating of metallic surfaces in excess of the following: (Regulation 7.59, section 2.1 and 3.1)

- 1) 4.3 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for clear coatings.
- 2) 3.5 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for air-dried coatings.
- 3) 3.5 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for extreme performance coatings.
- 4) 3.0 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for all other coatings.

ii. The owner or operator shall determine compliance with Specific Condition S1.a.ii based on a calendar month averaging period. (Regulation 7.59, section 3.2)

b. Opacity

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

c. PM

The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr. (Regulation 7.08, section 3.1.2) (See Comment 1)

d. TAC

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21)

e. HAP (40 CFR 63, Subpart M and Regulation 5.02)

See Appendix A, 40 CFR 63, Subpart M (MACT), Specific Condition S1.

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

- i. An owner or operator of an affected facility subject to this regulation shall maintain records that include, but not be limited to, the following: (Regulation 7.59, section 6.1)
 - 1) The regulation and section number applicable to the affected facility for which the records are being maintained,
 - 2) The applicable method and substrate type (metal, plastic, etc.),
 - 3) The amount and type of coatings (including catalyst and reducer for multi-component coatings) and solvent (including exempt compounds) used at each point of application during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month.
 - 4) The VOC content as applied in each coating and solvent,
 - 5) The date, or usage record period, for each application of coating and solvent,
 - 6) The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month.
- ii. The VOC content shall be calculated using a percent solids basis (excluding water and exempt solvents) for coatings using EPA Method 24. (Regulation 7.59, section 6.2)
- iii. The owner or operator shall, monthly, calculate and record the average monthly VOC content for the coatings.

b. **Opacity**

- i. The owner or operator shall inspect the filters in the paint booth(s) at least monthly to ensure proper installment (i.e. proper alignment/placement, gaps, etc.) and replace as needed.
- ii. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters if filters were replaced.

c. **PM**

The owner or operator shall monthly calculate PM emissions from this emission unit on an average hourly basis.

d. **TAC**

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. If a new TAC is introduced or the content of a TAC in a raw material increases, the owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions.

e. **HAP** (40 CFR 63, Subpart Mmmm and Regulation 5.02)

See Appendix A, 40 CFR 63, Subpart Mmmm (MACT), Specific Condition S2.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

a. **VOC**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for Regulation 7.59:

- i. Emission unit ID number and emission point or stack ID number;
- ii. The beginning and ending date of the reporting period;
- iii. Identification of each exceedance of the coating VOC content limit and the quantity of excess emissions;
- iv. Description of any corrective action taken;
- v. A negative declaration if no excess emissions occurred.

b. **Opacity**

- i. Any deviation from the requirement to perform the required monthly visual inspections of the paint booth PM filter system; and
- ii. Any deviation from the requirement to record the results of each paint

booth PM filter system inspection.

c. **PM**

The owner or operator shall identify all periods of exceeding PM emission standards during a reporting period. The report shall include the following:

- 1) Emission point ID number;
- 2) The date and duration (including the start and stop time) during which a deviation occurred;
- 3) The quantity of excess emissions;
- 4) Summary information on the cause or reason for excess emissions;
- 5) Corrective action taken to minimize the extent and duration of each excess emission event;
- 6) Measures implemented to prevent reoccurrence of the situation that resulted in excess PM emissions;
- 7) If no deviations occur during a semi-annual reporting period, the report shall contain a negative declaration.

d. **TAC**

- i. Within 6 months of a change of a raw material as described in S2.d.ii, the owner or operator shall submit the re-evaluated EA demonstration to the District.
- ii. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- iii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)

e. **HAP** (40 CFR 63, Subpart M MMM and Regulation 5.02)

See Appendix A, 40 CFR 63, Subpart M MMM (MACT), Specific Condition S3.

U16 Comments

1. Using the minimum spray gun transfer efficiency of 35%, the percent solids of the material (45.9%), and the efficiency of the filters (greater than 90%), the PM emission limit of the spray booth cannot be exceeded.
2. Metal parts are wipe-cleaned before being coated. The wipe-down cleaners used for cleaning the metal parts are subject to Regulation 7.59.
3. The potential uncontrolled TAC emissions from this unit have been determined by the District to be de minimis based on PTE evaluation.
4. This unit was previously permitted under Construction Permit 29-10.

Emission Unit U17: Blast booths

U17 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1, 2, 3.1, 3.2 and 3.3

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.14	Hazardous Air Pollutants and Source Categories	1, 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U17 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
E12	One (1) blasting booth, make Blast-It-All, model 122010, rated at 1,417 lb/hr, located in Hut 51.	5.00, 5.01, 5.14, 5.20, 5.21, 5.22, 5.23, 7.08	C2	S12
E42	One (1) blasting booth, make JBI, model BE-25-WSB-S, rated at 1,850 lb/hr, located at the north end of Bldg. B.		C42	S31
E45	One (1) blasting booth, make Hoffman, model BDF T2-12, rated at 1,097 lb/hr, located at Hut 51.		C45	S33

U17 Control Devices:

ID	Description	Performance Indicator	Stack ID
C2	One (1) baghouse controlling PM emissions from Blast-It-All blast booth (E12)	Pressure drop range 2.0" – 8.3" water column	S12
C42	One (1) baghouse controlling PM emissions from JBI blast booth, make JBI, model 60-10-3.	Pressure drop range 3.5"±2.0" water column	S31
C45	One (1) baghouse controlling PM emissions from Hoffman blast booth (E45), make Donaldson Torit, model DFR2-212	Pressure drop range 1.0" - 6.0" water column	S33

U17 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. PM**

- i. The owner or operator shall not allow PM emissions to exceed 2.90 lb/hr for blast booth E12. (Regulation 7.08, section 3.1.2)
- ii. The owner or operator shall not allow PM emissions to exceed 3.41 lb/hr for the blast booth E42. (Regulation 7.08, section 3.1.2)
- iii. The owner or operator shall not allow PM emissions to exceed 2.47 lb/hr for blast booth E45. (Regulation 7.08, section 3.1.2)
- iv. The owner or operator shall utilize the control devices at all times the blast booths are in operation and shall, to the extent practicable, maintain and operate the affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. (Regulation 2.03, section 5.1) (See Comment 1)

b. Opacity

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

c. TAC

- i. The owner or operator shall not allow chromium VI emissions to exceed 0.04 lb/yr for each blast booth. (Regulation 5.21, section 3.1.1) (See Comment 2)
- ii. The owner or operator shall not exceed 1,030 hours of operation per year for blast booth E12. (See Comment 2)
- iii. The owner or operator shall not exceed 1,330 hours of operation per year for blast booth E45. (See Comment 2)
- iv. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21)
- v. See Specific Condition S1.a.iv. (See Comment 2)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **PM**

- i. The owner or operator shall monthly calculate the PM emissions on an average hourly basis.
- ii. The owner or operator shall, monthly, perform and keep records of a visual inspection of the structural and mechanical integrity of the dust collector for signs of damage, air leakage, corrosion, etc. and repair as needed.
- iii. The owner or operator shall, daily, monitor and record the pressure drop across baghouse C2, C42, and C45 while the blast booths and baghouses are in operation. The owner or operator shall take corrective action if the pressure drop across the baghouse is out of the normal pressure drop range.
- iv. The owner or operator shall maintain daily records that identify all periods of bypassing the control devices while the blast booths are in operation or a declaration entered into the records that the control devices operated at all times the blast booths were in operation for a given day. The record shall include the date, duration (including start and stop time) of each bypass event, identification of the control device and process equipment in operation, the total lb/hr of PM during each bypass event, summary information on the cause or reason for each control device bypass event, corrective action taken to minimize the extent and duration of each bypass event, and measures implemented to prevent reoccurrence of the situation that resulted in bypassing the control devices.

b. **Opacity**

- i. The owner or operator shall conduct a monthly one-minute visible emissions survey, during normal operation and daylight hours, of the emission points. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.
- ii. At emissions points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 25 hours of the initial observation.

- iii. The owner or operator shall maintain records, monthly, of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what, if any, corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

c. **TAC**

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. If a new TAC is introduced or the content of a TAC in a raw material increases, the owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions.
- iii. The owner or operator shall document the hours of operation daily of the blast booth.
- iv. The owner or operator shall maintain 12-month rolling totals of the hours of operation of the blast booth.
- v. The owner or operator shall monthly calculate monthly and 12-consecutive month rolling total Chromium VI emissions from this emission unit.
- vi. The owner or operator shall maintain daily records that identify all periods of bypassing the control devices while the blast booth is in operation or a declaration entered into the records that the control devices operated at all times the blast booth was in operation for a given day. The record shall include the date, duration (including start and stop time) of each bypass event, identification of the control device and process equipment in operation, the total lb/hr of each TAC during each bypass event, summary information on the cause or reason for each control device bypass event, corrective action taken to minimize the extent and duration of each bypass event, and measures implemented to prevent reoccurrence of the situation that resulted in bypassing the control devices.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

a. **PM**

- i. The owner or operator shall identify all periods of exceeding PM lb/hr

emission standards during a reporting period. The report shall include the following:

- 1) Emission point ID number;
 - 2) The date and duration (including start and stop time) during which a deviation occurred;
 - 3) The quantity of excess emissions;
 - 4) Summary information on the cause or reason for excess emissions;
 - 5) Corrective action taken to minimize the extent and duration of each excess emissions event;
 - 6) Measures implemented to prevent reoccurrence of the situation that resulted in excess PM emissions;
 - 7) If no deviations occur during a semi-annual reporting period, the report shall contain a negative declaration.
- ii. The owner or operator shall report any deviation from the requirement of performing a monthly visual inspection of the structural and mechanical integrity of the baghouses.
- iii. The owner or operator shall report any deviation that the pressure drop across baghouse C2, C42, or C45 is out of the normal range and the action taken to correct the deviation.
- iv. Any deviation from the requirement to utilize the baghouses at all times the blast booth and blast cabinet are in operation, including the following:
- 1) Number of times the shot blast booth by-passes the baghouses and are vented to the atmosphere;
 - 2) The date, duration (including start and stop time) of each by-pass to the atmosphere;
 - 3) Calculated quantity of tons of PM emitted for each by-pass; and
 - 4) A negative declaration if no by-passes occurred.

b. Opacity

- i. Any deviation from the requirement to perform visible emission surveys or Method 9 tests;
- ii. Any deviation from the requirement to record the results of each visible emissions survey and Method 9 test performed;
- iii. The number, date, and time of each visible emission survey where visible emissions were observed and the results of the Method 9 test performed;
- iv. Identification of all periods of exceeding the opacity standard; and
- v. Description of any corrective action taken for each exceedance of the opacity standard.

c. TAC

- i. Within 6 months of a change of a raw material as described in S2.c.ii, the owner or operator shall submit the re-evaluated EA demonstration to the District.
- ii. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- iii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)
- iv. The owner or operator shall report the 12-month rolling totals of the hours of operation of the blast booth for each month in the reporting period.
- v. The owner or operator shall report monthly and 12-consecutive month rolling total Chromium emissions for each month in the reporting period.
- vi. Identification of all periods of bypassing the baghouse while the blast booth was in operation during a reporting period. The report shall include the date, duration (including start and stop time) of each bypass event, the total lb/hr of each TAC during each bypass event, summary information on the cause or reason for each control device bypass event, corrective action taken to minimize the extent and duration of each bypass event, and measures implemented to prevent reoccurrence of the situation that resulted in bypassing the baghouse. If there are no periods of bypassing the baghouse during a reporting period, the owner or operator shall submit a negative declaration for the reporting period.

U17 Comments

1. The District has determined the uncontrolled PM emissions from each blast booth of this unit exceed its lb/hr PM emission limit. Therefore the owner or operator is required to operate the control devices on these blast booths at all times that the units are in operation.
2. The District has determined that the uncontrolled Chromium VI emissions from the blast booths are not de minimis. Therefore, in lieu of modeling, the source is required to use the control devices and limit hours of operation to keep the emissions under the de minimis level.

3. BAE Systems conducted the performance test for blast booth E42 required by Construction Permit 28-10 on April 5, 2011 and June 14, 2011. According to the test report received September 13, 2011, the uncontrolled and controlled PM emission rates are 68.4 lb/hr and 0.17 lb/hr; the uncontrolled and controlled Chromium VI emission rates are 2.42×10^{-4} lb/hr and 6.99×10^{-7} lb/hr.
4. BAE Systems conducted the performance test for blast booth E12 required by Construction Permit 29845-10-C (R1) on April 5, 2011. According to the test report received June 3, 2011, the uncontrolled and controlled PM emission rates are 118 lb/hr and 0.476 lb/hr; the uncontrolled and controlled Chromium VI emission rates are 3.04×10^{-3} lb/hr and 1.56×10^{-5} lb/hr.
5. The PM emissions and Chromium emissions can be determined using emission factors from the approved performance tests as described in Comment 3 and 4. Alternatively, the source may elect to use emission factors from AP-42, Table 13.2.6.
6. This unit was previously permitted under Construction Permit 28-10 (E42), 29845-10 (E12) and 31207-11 (E45).

Permit Shield

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

Off-Permit Documents

There are no off permit documents associated with this Title V permit.

Alternative Operating Scenario

The company requested no alternative operating scenario in its Title V application.

Insignificant Activities

Equipment	Quan.	PTE (tpy)	Regulation Basis
Natural gas-fired heating equipment, including furnaces, heaters, air make-up units, and/or small NG-fired boilers, each unit < 10.0 MM Btu/hr heat input capacity and with a cumulative site limit of 42.0 MM Btu/hr (unit U11)	Various	0.77 NO _x (furnace)	Reg. 2.02, section 2.1.1. Permit U11 per Reg. 7.06
Indirect heat exchangers, < 1.0 MMBtu/hr: space heater 0.05 MMBtu/hr each	8	0.17 NO _x	Reg. 2.02, section 2.1.1.
Internal combustion engines and vehicles used for transport	16	1.80 NO _x (one engine)	Reg. 2.02, section 2.2
Brazing, soldering or welding equipment	35	0.08 PM ₁₀	Reg. 2.02, section 2.3.4
Wood-working equipment (previous U13, E40)	1	1.98 PM ₁₀	Reg. 2.02, section 2.3.5 Reg. 7.08 (See Note 7)
Ovens used or potting materials	2	0.86 NO _x	Reg. 2.02, section 2.3.6
10 gallons Drip Pan	4	0.03 VOC	Reg. 2.02, section 2.3.9.2
10 gal magnaflux reservoir	1	0.0002 VOC	Reg. 2.02, section 2.3.9.2
4000 gal machining oil storage tank with vapor pressure <10 mmHg (See unit IA1)	1	0.001 VOC	Reg. 2.02, section 2.3.9.2
350 gal storage tanks for developing/rinsing/dying (See unit IA1)	7	0.02 VOC	Reg. 2.02, section 2.3.24
Laboratory ventilating	1	N/A	Reg. 2.02, section 2.3.11
Heat treat oven 1.0 MMBtu/hr	1	0.43 NO _x	Reg. 2.02, section 2.3.14
Cold solvent parts cleaners equipped with	9	0.15 VOC	Reg. 2.02, section 2.3.15

Equipment	Quan.	PTE (tpy)	Regulation Basis
secondary reservoirs (See unit IA2)			
250 gallons gasoline tank	1	0.09 VOC	Reg. 2.02, section 2.3.24
Diesel or fuel oil storage tank	1	0.001 VOC	Reg. 2.02, section 2.3.25
Syntactic foam injection process (See unit IA3)	1	0.05 VOC	Reg. 2.16, section 1.23
Foam filling component cavities with polyurethane mixture (See unit IA3)	1	1E-06 VOC	Reg. 2.16, section 1.23
Proximity switch manufacture (See unit IA3)	1	0.01 VOC	Reg. 2.16, section 1.23
Miscellaneous application of adhesive and sealant (See unit IA3)	1	0.04 VOC	Reg. 2.16, section 1.23
Emergency generators (See unit IA4)	2	1.1 NOx	Reg. 2.16, section 1.23
Metal working Equipment (previous U14 – E41), consists of one belt sander and one bench grinder controlled by filter box	1	0.80 PM	Reg. 2.16, section 1.23
Oil/Water Separator 250 gal/day	1	0.01 VOC	Reg. 7.36, section 1
Wastewater treatment tanks, in Building 118, used for wastewater from unit U3: 701A, 701C, 701D, 701E, 702A, 702B, 702C, 702D, 710A, 710B, 710C, 710D, 720A, 720B, 720C, 730A, 730B, 730C, 739A, 740A, 740B, 750A, 760A, 760B, 760C, 770A, 770B, 780A, 780B, 790A	30	N/A	Reg. 2.16, section 1.23
Temporary holding tanks for unit U3: CDT-1, CDT-2, RWTT-3, DDT-1, DI	5	N/A	Reg. 2.16, section 1.23

- 1) Insignificant activities identified in District Regulation 2.02 Section 2, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.
- 2) Insignificant activities identified in District Regulation 2.02 Section 2 shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.
- 3) The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
- 4) The owner or operator shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16 section 4.3.5.3.6.
- 5) The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or use Potential to Emit (PTE) to be reported on the annual emission inventory.

- 6) The District has determined pursuant to Regulation 2.16 section 4.1.9.4 that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.

- 7) The wood-working equipment is an insignificant activity based on PTE evaluation and Regulation 2.02, section 2.3.5. However, this wood-working equipment is still subject to Regulation 7.08. The uncontrolled PTE for this equipment cannot exceed any standards under Regulation 7.08. There are no additional requirements and no emission unit required for this equipment.

Emission Unit IA1: Storage tanks**IA1 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 2, 3, 4, & 5
6.13	Standards of Performance for Existing Storage Vessels for Volatile Organic Compounds	1 through 6
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19
7.12	Standards of Performance for New Storage Vessels for Volatile Organic Compounds	1 through 8

IA1 Equipment:

Emission Point	Description	Applicable Regulation	Control ID
IE1	One (1) 4000 gal machining oil storage tank	6.43 6.13/7.12	N/A
IE2	One (1) 350 gal storage tank, No. 017811X, for Sherwin D-11G		
IE3	One (1) 350 gal water rinse tank , No. 017812X		
IE4	One (1) 350 gal storage tank, No. 017813X, for Sherwin ER-83A		
IE5	One (1) 350 gal water rinse tank , No. 017814X		
IE6	One (1) 350 gal storage tank, No. 017815X, for Sherwin RC-65		
IE7	One (1) 350 gal storage tank, No. 017816X, for Turco WO #1		
IE8	One (1) 350 gal storage tank, No. 017817X, for Truco WO #1		

IA1 Control Devices:

There are no control devices associated with emission unit IA1.

IA1 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**VOC**

The owner or operator shall not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia in the storage vessel(s), unless the storage tank is equipped with a permanent submerged fill pipe. (Regulation 6.12/7.13, section 3.3)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

VOC

- i. The owner or operator of the storage vessel(s) shall maintain records of the material stored and the vapor pressure in each storage vessel and if the contents of the storage vessel(s) are changed a record shall be made of the new contents, the new vapor pressure, and the date of the change in order to demonstrate compliance with Specific Condition S1.
- ii. The owner or operator shall keep a record that shows if the storage vessel is equipped with a submerged fill pipe. Submerged fill pipe means any fill pipe the discharge of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean every fill pipe the discharge opening of which is entirely submerged when the liquid level is 2 times the fill pipe diameter above the bottom of the tank.

S3. Reporting (Regulation 2.16, section 4.1.9.3)

The owner or operator shall timely report abnormal conditions or operational changes which may cause excess emissions.

VOC

There are no routine compliance reporting requirements for this equipment.

IA1 Comments

The storage tanks under this unit meet the definition of insignificant activities per Regulation 2.16, section 1.23. However, Regulation 6.13 or 7.12 applies to each VOC storage vessel that has a capacity greater than 250. These tanks shall meet the requirements under Regulation 6.13 or 7.12.

Emission Unit IA2: Parts washers with secondary reservoirs

IA2 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 2, 3, 4, & 5
6.18	Standards of Performance for Solvent metal Cleaning Equipment	1 through 6
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19

IA2 Equipment:

Emission Point	Description	Applicable Regulation	Control ID
IE9 through IE17	Nine (9) parts washers each equipped with a secondary reservoir	6.18, 6.43	N/A

IA2 Control Devices:

There are no control devices associated with emission unit IA2.

IA2 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**VOC**

- a. The owner or operator shall install, maintain, and operate the control equipment as follows: (Regulation 6.18, section 4)
 - i. The cold cleaner shall be equipped with a tightly fitting cover that is free of cracks, holes, or other defects. If the solvent is agitated or heated, then the cover shall be designed so that it can be easily operated with 1 hand. (Regulation 6.18, section 4.1.1)
 - ii. The cold cleaner shall be equipped with a drainage facility that is designed so that the solvent that drains off parts removed from the cleaner will return to the cold cleaner. The drainage facility may be external if the District determines that an internal type cannot fit into the cleaning system. (Regulation 6.18, section 4.1.2)
 - iii. A permanent, conspicuous label summarizing the operating requirements specified in Specific Condition S1.b. shall be installed on or near the cold cleaner. (Regulation 6.18, section 4.1.3)
 - iv. If used, the solvent spray shall be a fluid stream, not a fine, atomized, or shower type spray, at a pressure that does not cause excessive splashing. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaner. Solvent flow shall be directed downward to avoid turbulence at the air-solvent interface and to prevent solvent from splashing outside of the cold cleaner. (Regulation 6.18, section 4.1.4)
 - v. Work area fans shall be located and positioned so that they do not blow across the opening of the cold cleaner. (Regulation 6.18, section 4.1.6)
 - vi. The solvent-containing portion of the cold cleaner shall be free of all liquid leaks. Auxiliary cold cleaner equipment such as pumps, water separators, steam traps, or distillation units shall not have any visible liquid leaks, visible tears, or cracks. (Regulation 6.18, section 4.1.8)
- b. The owner or operator shall observe at all times the following operating requirements: (Regulation 6.18, section 4.2)
 - i. Waste solvent shall neither be disposed of nor transferred to another party in a manner such that more than 20% by weight of the waste solvent can evaporate. Waste solvent shall be stored only in a covered container. A

covered container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container. (Regulation 6.18, section 4.2.1)

- ii. The solvent level in the cold cleaner shall not exceed the fill line. (Regulation 6.18, section 4.2.2)
 - iii. The cold cleaner cover shall be closed whenever a part is not being handled in the cold cleaner. (Regulation 6.18, section 4.2.3)
 - iv. Parts to be cleaned shall be racked or placed into the cold cleaner in a manner that will minimize drag-out losses. (Regulation 6.18, section 4.2.4)
 - v. Cleaned parts shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping, or rotating, the parts shall be positioned so that the solvent drains directly back to the cold cleaner. (Regulation 6.18, section 4.2.5)
 - vi. A spill during solvent transfer shall be cleaned immediately, and the wipe rags or other sorbent material shall be immediately stored in a covered container for disposal or recycling, unless enclosed storage of these items is not allowed by fire protection authorities. (Regulation 6.18, section 4.2.6)
 - vii. Sponges, fabric, wood, leather, paper products, and other absorbent material shall not be cleaned in a cold cleaner. (Regulation 6.18, section 4.2.7)
- c. The owner or operator shall not operate a cold cleaner using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F). (Regulation 6.18, section 4.3.2)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

VOC

- a. The owner or operator shall maintain records that include the following for each purchase: (Regulation 6.18, section 4.4.2)
 - i. The name and address of the solvent supplier,
 - ii. The date of the purchase,
 - iii. The type of the solvent, and
 - iv. The vapor pressure of the solvent measured in mm Hg at 20°C (68°F).

- b. All records required in Specific Condition S2.a shall be retained for 5 years and made available to the District upon request. (Regulation 6.18, section 4.4.3)

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

VOC

There are no routine compliance reporting requirements for Regulation 6.18.

IA2 Comments

The parts washers under this unit meet the definition of insignificant activities per Regulation 2.16, section 1.23. However, Regulation 6.18 applies to each cold cleaner that use VOC to remove soluble impurities from metal surfaces. These parts washers shall meet the requirements under Regulation 6.18.

Emission Unit IA3: Minor VOC emission units**IA3 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 2, 3, 4, & 5
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3, 4, & 5

IA3 Equipment:

Emission Point	Description	Applicable Regulation	Control ID
IE18	One (1) Syntactic foam injection process	7.25	N/A
IE19	One (1) Foam filling component cavities with polyurethane mixture		
IE20	One (1) Proximity switch manufacture		
IE21	One (1) Miscellaneous application of adhesive and sealant		

IA3 Control Devices:

There are no control devices associated with emission unit IA3.

IA3 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**VOC**

The owner or operator shall not allow or cause VOC emissions to exceed 5 tons from Regulation 7.25 affected facilities during any twelve consecutive month period, unless a BACT is submitted and approved by the District. (Regulation 7.25, section 2.1) (See Comment 1)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

VOC

- i. The owner or operator shall daily record and maintain the production records of each non-BACT Regulation 7.25 affected facility. (Regulation 1.05, section 4) (See Comment 2)
- ii. The owner or operator shall record by the end of the first week of each month the parameters necessary to calculate the material usages during the previous month from each non-BACT Regulation 7.25 affected facility. By the end of the month, the daily usage of each VOC containing material shall be calculated and recorded, for each process, by proportioning the month's usage of each VOC containing material to the daily production for each process. (Regulation 1.05, section 4)
- iii. The owner or operator shall monthly calculate and record the monthly consecutive 12-month total VOC emissions each calendar month to show compliance with the 5 ton per year limit on non-BACT Regulation 7.25 affected facilities.

S3. Reporting (Regulation 2.16, section 4.1.9.3)

The owner or operator shall timely report abnormal conditions or operational changes which may cause excess emissions.

VOC

The owner or operator shall report the individual totals of the emissions that are emitted by each of the affected facilities and future equipment to which Regulation 7.25 applies without a BACT analysis. (See Comment 2)

IA3 Comments

1. The equipment under this unit meets the definition of insignificant activities per Regulation 2.16, section 1.23. However, the source is subject to a plant-wide 5 tons per 12-month limit per Regulation 7.25. The owner or operator shall demonstrate compliance with the limit in accordance with Regulation 7.25.
2. The following affected facilities are included in the Regulation 7.25 non-BACT plant-wide 5 ton per year limit:

Unit	Point	Description	PTE for VOC (tpy)
U1	E5, E6, E7	Three (3) paint booths for coating metal and non-metal parts	57.7
U5	E32	One (1) Fiberglass Repair Application	0.604
U10	E37	One (1) Spray Coating Operation for Adhesive and Fire Retardant	1.87
IA3	IE18	One (1) Syntactic foam injection process	0.05
	IE19	One (1) Foam filling component cavities with polyurethane mixture	1E-06
	IE20	One (1) Proximity switch manufacture	0.01
	IE21	One (1) Miscellaneous application of adhesive and sealant	0.04

Emission Unit IA4: Two (2) emergency generators

IA4 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
40 CFR 63, Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	6603, 6604, 6605, 6625, 6640, 6645, 6655

IA4 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
IE22	One (1) diesel fueled emergency generator, installed in 1998, rated at 120HP, make Onan, model 60DGCBNE, for emergency lighting in buildings.	40 CFR 63, Subpart ZZZZ	N/A	N/A
IE23	One (1) diesel fueled emergency generator, installed in 1997, rated at 142HP, make KOHLER, model EG-AS, for back-up to IT servers in Building 96.			

IA4 Control Devices: There are no control devices associated with this equipment.

IA4 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**HAP**

- i. For an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, the owner or operator shall comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. (40 CFR 63.6595(a)(1))
- ii. Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. (40 CFR 63.6604(b))
- iii. The owner or operator of an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions shall comply with the following requirements in Table 2c to this subpart: (40 CFR 63.6602))
 - 1) The owner or operator shall change the oil and filter every 500 hours of operation or annually, whichever comes first. The owner or operator has the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart. (40 CFR 63, Subpart ZZZZ, Table 2c (1)(a))
 - 2) The owner or operator shall inspect the air cleaners every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. (40 CFR 63, Subpart ZZZZ, Table 2c (1)(b))
 - 3) The owner or operator shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. (40 CFR 63, Subpart ZZZZ, Table 2c (1)(c))
- iv. General requirements for complying with 40 CFR 63, Subpart ZZZZ:

- 1) The owner or operator shall be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to the RICE at all times. (40 CFR 63.6605(a))
 - 2) At all times the owner or operator shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.6605(b))
- v. The owner or operator shall demonstrate continuous compliance with each emission limitation, operating limitation, and other applicable requirements in Tables 2c to this subpart. (40 CFR 63.6640(a))
- vi. The owner or operator shall report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in § 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE. (40 CFR 63.6640(b))
- vii. The owner or operator shall operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If the owner or operator does not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. (40 CFR 63.6640(f))

- 1) There is no time limit on the use of the emergency stationary RICE in emergency situations. (40 CFR 63.6640(f)(1))
- 2) The owner or operator may operate the emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2). (40 CFR 63.6640(f)(2))
 - (a) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. (40 CFR 63.6640(f)(2)(i))
 - (b) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies, or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. (40 CFR 63.6640(f)(2)(ii))
 - (c) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. (40 CFR 63.6640(f)(2)(iii))
- 3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided

in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (40 CFR 63.6640(f)(3))

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

HAP

- i. Monitoring, installation, collection, operation, and maintenance requirements: (40 CFR 63.6625)
 - 1) The owner or operator shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 63.6625(e))
 - 2) The owner or operator shall install a non-resettable hour meter if one is not already installed. (40 CFR 63.6625(f))
 - 3) The owner or operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup. (40 CFR 63.6625(h))
 - 4) The owner or operator has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are

not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (40 CFR 63.6625(i))

- ii. Recordkeeping requirements: (40 CFR 63.6655)
 - 1) The owner or operator shall keep the following records that apply to your RICD: (40 CFR 63.6655(a))
 - (a) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv). (40 CFR 63.6655(a)(1))
 - (b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (40 CFR 63.6655(a)(2))
 - (c) Records of all required maintenance performed on the air pollution control and monitoring equipment. (40 CFR 63.6655(a)(4))
 - (d) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.6655(a)(5))
 - 2) The owner or operator shall keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to the RICE. (40 CFR 63.6655(d))
 - 3) The owner or operator shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment

control device (if any) according to your own maintenance plan. (40 CFR 63.6655(e))

- 4) The owner or operator shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR 63.6640(f)(2)(ii) or (iii) or 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. (40 CFR 63.6655(f))

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall timely report abnormal conditions or operational changes which may cause excess emissions.

HAP

If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. (40 CFR 63, Subpart ZZZZ, Footnote 1 of Table 2c)

IA4 Comment

1. These emergency generators meet the definition of insignificant activities per Regulation 2.16, section 1.23, therefore, it is de minimis for STAR. However, this emergency generator is subject to 40 CFR 63, Subpart ZZZZ, because it involves a new stationary reciprocating internal combustion engine (RICE) located at a major source of HAP emissions. The owner or operator shall demonstrate compliance with the requirements in accordance with Regulation 40 CFR 63, Subpart ZZZZ.
2. The associated internal storage tank for diesel fuel is exempt from District permitting requirements in accordance with Regulation 2.02, section 2.3.9.2.

Appendix A - 40 CFR 63, Subpart MMMM (MACT)

Specific Conditions

S1. Standards (Regulation 2.16, section 4.1.1)

HAP

- i. The owner or operator shall limit the organic HAP emissions to the atmosphere from the following paint booths to no more than 2.6 pound organic HAP per gallon coating solids used during each 12-month compliance period, as the following: (40 CFR 63.3890) (See Comment 1)

Emi. Unit	Emi. Point	Description	Limit (lb/gal)	Citation
U1	E5	One (1) paint booth installed 1986	2.6	63.3890(b)(1)
	E6	One (1) paint booth with small oven installed 1992		
	E7	One (1) paint booth with small oven installed 1992		
U16	E44	One (1) JBI front air flow spray booth model T-25-WSB-S installed 2010		

- ii. This subpart applies to the following items that are used for surface coating of miscellaneous metal parts and products: (40 CFR 63.3882(b))
- 1) All coating operations as defined in §63.3981;
 - 2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
 - 3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
 - 4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.
- iii. *Compliance date.* The date by which you must comply with this subpart is called the compliance date. The compliance date begins the initial compliance period during which you conduct the initial compliance demonstration described in §63.3940, 63.3950, and 63.3960. (40 CFR 63.3883)

- 1) For a new or reconstructed affected source, the compliance date is the applicable date in paragraph (a)(1) or (2) of this section:
 - (a) If the initial startup of your new or reconstructed affected source is before January 2, 2004, the compliance date is January 2, 2004. (40 CFR 63.3883(a)(1))
 - (b) If the initial startup of your new or reconstructed affected source occurs after January 2, 2004, the compliance date is the date of initial startup of your affected source. (40 CFR 63.3883(a)(2))
 - 2) For an existing affected source, the compliance date is the date 3 years after January 2, 2004. (40 CFR 63.3883(b))
 - 3) For an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP emissions, the compliance date is specified in the following:
 - (a) For any portion of the source that becomes a new or reconstructed affected source subject to this subpart, the compliance date is the date of initial startup of the affected source or January 2, 2004, whichever is later. (40 CFR 63.3883(c)(1))
 - (b) For any portion of the source that becomes an existing affected source subject to this subpart, the compliance date is the date 1 year after the area source becomes a major source or 3 years after January 2, 2004, whichever is later. (40 CFR 63.3883(c)(2))
 - 4) You must meet the notification requirements in §63.3910 according to the dates specified in that section and in subpart A of this part. Some of the notifications must be submitted before the compliance dates described in paragraphs (a) through (c) of this section.
- iv. The owner or operator must include all coatings (as defined in §63.3981), thinners and/or additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit specified in §63.3890. To make this determination, you must use at least one of the following compliance options. You may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. You may use different compliance options for different coating operations, or at different times on the same coating operation. You may employ different compliance options when different coatings are applied to the same part, or when the same coating is applied to different parts. However, you may not use different compliance options at the

same time on the same coating operation. If you switch between compliance options for any coating operation or group of coating operations, you must document this switch as required by §63.3930(c), and you must report it in the next semiannual compliance report required in §63.3920. (40 CFR 63.3891)

- 1) *Compliant material option.* Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit in §63.3890, and that each thinner and/or other additive, and cleaning material used contains no organic HAP. You must meet all the requirements of §§63.3940, 63.3941, and 63.3942 to demonstrate compliance with the applicable emission limit using this option. (40 CFR 63.3891(a)) (See Comment 2)
 - 2) *Emission rate without add-on controls option.* Demonstrate that, based on the coatings, thinners, and/or other additives, and cleaning material used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to 2.60 lb organic HAP per gallon of coating solids used, calculated as a rolling 12-month emission rate and determined on a monthly basis. The owner or operator must meet all the requirements of 63.3950, 63.3951, and 63.3952 to demonstrate compliance with the emission limit using this option. (40 CFR 63.3891(b)) (See Comment 2)
- v. *Operating Limits.* For any coating operation for which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any operating limits. (40 CFR 63.3892(a))
- vi. *Work Practice Standards.* For any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls, the owner or operator is not required to meet any work practice standards. (40 CFR 63.3893(a))
- vii. *General Compliance Requirements:*
- 1) Any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls, as specified in 63.3891(a) and (b), must be in compliance with the applicable emission limit in 63.3890 at all times. (40 CFR 63.3900(a)(1))
 - 2) The owner or operator must always operate and maintain the affected source, including all air pollution control and monitoring equipment you use for purposes of complying with this subpart, according to the provision in 63.6(e)(1)(i). (40 CFR 63.3900(b))

- 3) The owner or operator shall meet the applicable General Provisions in 63.1 through 63.15, as shown in Table 2 to this subpart. (40 CFR 63.3901)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

HAP

- i. Compliance requirements for *compliant material option*.
 - 1) You must complete the initial compliance demonstration for the initial compliance period according to the requirements in §63.3941. The initial compliance period begins on the applicable compliance date specified in §63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through that month plus the next 12 months. The initial compliance demonstration includes the calculations according to §63.3941 and supporting documentation showing that during the initial compliance period, you used no coating with an organic HAP content that exceeded the applicable emission limit in §63.3890, and that you used no thinners and/or other additives, or cleaning materials that contained organic HAP as determined according to §63.3941(a). (40 CFR 63.3940) (See Comment 4)
 - 2) You may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the emission rate without add-on controls option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission limits in §63.3890 and must use no thinner and/or other additive, or cleaning material that contains organic HAP as determined according to this section. Any coating operation for which you use the compliant material option is not required to meet the operating limits or work practice standards required in §§63.3892 and 63.3893 , respectively. You must conduct a separate initial compliance demonstration for each general use, high performance, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation unless you are demonstrating compliance with a predominant activity or

facility-specific emission limit as provided in §63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. Use the procedures in this section on each coating, thinner and/or other additive, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. You do not need to redetermine the organic HAP content of coatings, thinners and/or other additives, and cleaning materials that are reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the compliant material option, provided these materials in their condition as received were demonstrated to comply with the compliant material option. (40 CFR 63.3941)

- 3) *Determine the mass fraction of organic HAP for each material used.* You must determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during the compliance period by using one of the following: (40 CFR 63.3941(a))
 - (a) *(Method 311 appendix A to 40 CFR part 63).* You may use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in paragraphs (a)(1)(i) and (ii) of this section when performing a Method 311 test. (40 CFR 63.3941(a)(1))
 - (i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point (*e.g.*, 0.3791). (40 CFR 63.3941(a)(1)(i))
 - (ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three

places after the decimal point (*e.g.*, 0.763). (40 CFR 63.3941(a)(1)(ii))

- (b) (*Method 24 appendix A to 40 CFR part 60*). For coatings, you may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may use the alternative method contained in appendix A to subpart PPPP of this part, rather than Method 24. You may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to subpart PPPP of this part, as a substitute for the mass fraction of organic HAP. (40 CFR 63.3941(a)(2))
- (c) *Alternative method*. You may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. You must follow the procedure in §63.7(f) to submit an alternative test method for approval. (40 CFR 63.3941(a)(3))
- (d) *Information from the supplier or manufacturer of the material*. You may rely on information other than that generated by the test methods specified in paragraphs (a)(1) through (3) of this section, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA- defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to paragraphs (a)(1) through (3) of this section, then the test method results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. (40 CFR 63.3941(a)(4))
- (e) *Solvent blends*. Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total

organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, you may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 to this subpart. If you use the tables, you must use the values in Table 3 for all solvent blends that match Table 3 entries according to the instructions for Table 3, and you may use Table 4 only if the solvent blends in the materials you use do not match any of the solvent blends in Table 3 and you know only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on Table 3 or 4 to this subpart, the Method 311 results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. (40 CFR 63.3941(a)(5))

- 4) *Determine the volume fraction of coating solids for each coating.* You must determine the volume fraction of coating solids (liters (gal) of coating solids per liter (gal) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in paragraphs (b)(1) through (4) of this section. If test results obtained according to paragraph (b)(1) of this section do not agree with the information obtained under paragraph (b)(3) or (4) of this section, the test results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. (40 CFR 63.3941(b))
 - (a) *ASTM Method D2697-86 (Reapproved 1998) or ASTM Method D6093-97 (Reapproved 2003).* You may use ASTM Method D2697-86 (Reapproved 1998), "Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings" (incorporated by reference, see §63.14), or ASTM Method D6093-97 (Reapproved 2003), "Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer" (incorporated by reference, see §63.14), to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids. (40 CFR 63.3941(b)(1))

- (b) *Alternative method.* You may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. You must follow the procedure in §63.7(f) to submit an alternative test method for approval. (40 CFR 63.3941(b)(2))
- (c) *Information from the supplier or manufacturer of the material.* You may obtain the volume fraction of coating solids for each coating from the supplier or manufacturer. (40 CFR 63.3941(b)(3))
- (d) *Calculation of volume fraction of coating solids.* You may determine the volume fraction of coating solids using Equation 1 of this section: (40 CFR 63.3941(b)(4))

$$V_s = 1 - \frac{m_{\text{volatiles}}}{D_{\text{avg}}} \quad (\text{Equation 1})$$

Where:

- V_s = Volume fraction of coating solids, liters (gal) coating solids per liter (gal) coating.
- $m_{\text{volatiles}}$ = Total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined according to Method 24 in appendix A of 40 CFR part 60, grams volatile matter per liter coating.
- D_{avg} = Average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-98 test results and other information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

- 5) *Determine the density of each coating.* Determine the density of each coating used during the compliance period from test results using ASTM Method D1475-98, "Standard Test Method for

Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or specific gravity data for pure chemicals. If there is disagreement between ASTM Method D1475-98 test results and the supplier's or manufacturer's information, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. (40 CFR 63.3941(c))

- 6) *Determine the organic HAP content of each coating.* Calculate the organic HAP content, kg (lb) of organic HAP emitted per liter (gal) coating solids used, of each coating used during the compliance period using Equation 2 of this section: (40 CFR 63.3941(d))

$$H_c = \frac{(D_c)(W_c)}{V_s} \quad \text{(Equation 2)}$$

Where:

- H_c = Organic HAP content of the coating, kg organic HAP emitted per liter (gal) coating solids used.
- D_c = Density of coating, kg coating per liter (gal) coating, determined according to paragraph (c) of this section.
- W_c = Mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to paragraph (a) of this section.
- V_s = Volume fraction of coating solids, liter (gal) coating solids per liter (gal) coating, determined according to paragraph (b) of this section.

- 7) *Compliance demonstration.* The calculated organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in §63.3890; and each thinner and/or other additive, and cleaning material used during the initial compliance period must contain no organic HAP, determined according to paragraph (a) of this section. You must keep all records required by §§63.3930 and 63.3931. As part of the notification of compliance status required in §63.3910, you must identify the coating operation(s) for which you used the compliant material option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in §63.3890, and you used no thinners and/or other additives, or cleaning materials that contained organic

HAP, determined according to the procedures in paragraph (a) of this section. (40 CFR 63.3941(e))

- 8) The owner or operator shall meet the following requirements to demonstrate *continuous compliance* with emission limitation:
 - (a) For each compliance period to demonstrate continuous compliance, you must use no coating for which the organic HAP content (determined using Equation 2 of §63.3941) exceeds the applicable emission limit in §63.3890, and use no thinner and/or other additive, or cleaning material that contains organic HAP, determined according to §63.3941(a). A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in §63.3940, is the end of a compliance period consisting of that month and the preceding 11 months. If you are complying with a facility-specific emission limit under §63.3890(c), you must also perform the calculation using Equation 1 in §63.3890(c)(2) on a monthly basis using the data from the previous 12 months of operation.
 - (b) If you choose to comply with the emission limitations by using the compliant material option, the use of any coating, thinner and/or other additive, or cleaning material that does not meet the criteria specified in paragraph (a) of this section is a deviation from the emission limitations that must be reported as specified in §§63.3910(c)(6) and 63.3920(a)(5).
 - (c) As part of each semiannual compliance report required by §63.3920, you must identify the coating operation(s) for which you used the compliant material option. If there were no deviations from the applicable emission limit in §63.3890, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in §63.3890, and you used no thinner and/or other additive, or cleaning material that contained organic HAP, determined according to §63.3941(a).
 - (d) You must maintain records as specified in §63.3930 and §63.3931. (40 CFR 63.3942(d))
- ii. Compliance requirements for *emission rate without add-on controls option*.

- 1) The owner or operator must complete the initial compliance demonstration for the initial compliance period according to requirements of §63.3951. The initial compliance period begins on the applicable compliance date specified in §63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of the month plus the next 12 months. You must determine the mass of organic HAP emissions and volume of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the calculations according to §63.3951 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in §63.3890 . (40 CFR 63.3950) (See Comment 4)

- 2) You may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operation in the affected source, or for all the coating operations in the affected source. You must use either the compliant material option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the emission rate without add-in controls option, the coating operation or group of coating operation must meet the applicable emission limit in §63.3890, but is not required to meet the operating limits or work practice standards in §63.3892 and §63.3893, respectively. You must conduct a separate initial compliance demonstration for each general use, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation unless you are demonstrating compliance with a predominant activity or facility-specific emission limit at provided in §63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of §63.3951. When calculating the organic HAP emission rate according to §63.3951, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operation for which you use the compliant material option or the emission rate with add-on controls option. You do not need to re-determine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been

reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the emission rate without add-on controls option. If you use coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed. (40 CFR 63.3951)

- 3) *Determine the mass fraction of organic HAP for each material.* The owner or operator shall determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in §63.3941(a). (40 CFR 63.3951(a))
- 4) *Determine the volume fraction of coating solids.* The owner or operator shall determine the volume fraction of coating solids (liter (gal) of coating per solids liter (gal) of coating) for each coating used during each month according to the requirements in §63.3941(b). (40 CFR 63.3951(b))
- 5) *Determine the density of each material.* The owner or operator shall determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If you are including powder coatings in the compliance determination, determine the density of the powder coatings, using ASTM Method D5965- 02, "Standard Test Methods for Specific Gravity of Coating Powders" (incorporated by reference, see §63.14), or information from the supplier. If there is disagreement between ASTM Method D1475-98 or ASTM Method D5965-02 test results and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of section §63.3951 (See Specific Condition S2.d.ii.6). (40 CFR 63.3951(c))

- 6) *Determine the volume of each material used.* The owner or operator shall determine the volume (liters) of each coating, thinner and/or other additives, and cleaning material used during each month by measurement or usage records. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine the volume of each material used. Instead you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, and 1C of section §63.951 (See Specific Condition S2.d.ii.6)). (40 CFR 63, section 63.3951(d))
- 7) *Calculate the mass of organic HAP emission.* The mass of organic HAP emission is the combined mass of organic HAP contained in all coating, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. The owner or operator shall calculate the mass of organic HAP emissions using Equation 1 of §63.3951 as follows: (40 CFR 63, section 63.3951(e))

$$H_e = A + B + C - R_w \quad \text{(Equation 1)}$$

Where:

- H_e = Total mass of organic HAP emissions during the month, kg.
- A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A.
- B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 1B.
- C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C.
- R_w = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to paragraph (e)(4) of §63.3951. (You may assign a value of zero to R_w if you do not wish to use this allowance.)

- (a) Calculate the kg organic HAP in the coating used during the month using Equation 1A of §63.3951 as follows: (40 CFR 63.3951(e)(1))

$$A = \sum_{i=1}^m (Vol_{c,i})(D_{c,i})(W_{c,i}) \quad \text{(Equation 1A)}$$

Where:

- A = Total mass of organic HAP in the coatings used during the month, kg.
- Vol_{c,i} = Total volume of coating, i, used during the month, liters.
- D_{c,i} = Density of coating, i, kg coating per liter coating.
- W_{c,i} = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in Appendix A to Subpart PPPP of Part 63.
- M = Number of different coatings used during the month.

- (b) Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of §63.3951 as follows: (40 CFR 63.3951(e)(2))

$$B = \sum_{j=1}^m (Vol_{t,j})(D_{t,j})(W_{t,j})$$

(Equation 1B)

Where:

- B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.
- Vol_{t,j} = Total volume of thinner and/or other additive, j, used during the month, liters.
- D_{t,j} = Density of thinner and/or other additive, j, kg per liter.
- W_{t,j} = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in Appendix A to Subpart PPPP of Part 63.
- N = Number of different thinners and/or other additives used during the month.

- (c) Calculate the kg organic HAP in the cleaning materials used during the month using Equation 1C of §63.3951 as follows: (40 CFR 63.3951(e)(3))

$$C = \sum_{k=1}^p (Vol_{s,k})(D_{s,k})(W_{s,k})$$

(Equation 1C)

Where:

- C = Total mass of organic HAP in the cleaning materials used during the month, kg.
- Vol_{s,k} = Total volume of cleaning material, k, used during the month, liters.
- D_{s,k} = Density of cleaning material, k, kg per liter.
- W_{s,k} = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.
- P = Number of different cleaning materials used during the month.

- 8) *Calculate the total volume of coating solids used.* The owner or operator shall determine the total volume of coating solids used, liters, which is the combined volume of coating solids for all the coatings used during each month, using Equation 2 of §63.3951 as follows: (40 CFR 63, section 63.3951(f))

$$V_{st} = \sum_{i=1}^m (Vol_{c,i})(V_{s,i})$$

(Equation 2)

Where:

- V_{st} = Total volume of coating solids used during the month, liters.
- Vol_{c,i} = Total volume of coating, i, used during the month, liters.
- V_{s,i} = Volume fraction of coating solids for coating, i, liter solids per liter coating, determined according to §63.3941(b).
- M = Number of coatings used during the month.

- 9) *Calculate the total volume of coating solids used.* The owner or operator shall calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per liter (gal) coating solids used, using Equation 3 of §63.3951 as follows. (40 CFR 63, section 63.3951(g))

$$H_{yr} = \frac{\sum_{y=1}^n H_e}{\sum_{y=1}^n V_{st}}$$

(Equation 3)

Where:

H_{yr}	=	Average organic HAP emission rate for the compliance period, kg organic HAP emitted per liter coating solids used.
H_e	=	Total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 1.
V_{st}	=	Total volume of coating solids used during month, y, liters, as calculated by Equation 2.
y	=	Identifier for months.
n	=	Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

- 10) *Compliance demonstration.* The organic HAP emission rate for the initial compliance period calculated using Equation 3 of section §63.3951 must be less than or equal to the applicable emission limit for each subcategory in §63.3890 or the predominant activity or facility-specific emission limit allowed in §63.3890(c). You must keep all records as required by §63.3930 and §63.3931. As part of the notification of compliance status required by §63.3910, you must identify the coating operation(s) for which you used the emission rate without add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in §63.3890, determined according to the procedures in this section. (40 CFR 63, section 63.3951(h))
- 11) The owner or operator shall meet the following requirements to demonstrate *continuous compliance* with emission limitation:
- (a) To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to §63.3951(a) through (g), must be less than or equal to the applicable emission limit in §63.3890. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in §63.3950 is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculation in 63.3951(a) through (g) on a monthly basis using data from the previous 12 months of operation. (40 CFR 63.3952(a))

- (b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in §63.3890, this is a deviation from the emission limitation for that compliance period and must be reported as specified in §63.3910(c)(6) and §63.3920(a)(6). (40 CFR 63.3952(b))
 - (c) As part of each semiannual compliance report required by §63.3920, you must identify the coating operation(s) for which you used the emission rate without add-on controls option. If there were no deviations from the emission limitations, you must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in §63.3890, determined according to §63.3951(a) through (g). (40 CFR 63.3952(c))
 - (d) You must maintain records as specified in §63.3930 and §63.3931. (40 CFR 63.3952(d))
- iii. The owner or operator shall maintain the following records:
- 1) The owner or operator must collect and keep records of the data and information specified in section §63.3930. Failure to collect and keep these records is a deviation from the applicable standard. (40 CFR 63.3930)
 - 2) A copy of each notification and report that you submitted to comply with Subpart Mmmm and the documentation supporting each notification and report. (40 CFR 63.3930(a))
 - 3) A current copy of information provided by the materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning materials, and the volume fraction of coating solids for each coating. If you conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, you must keep a copy of the complete test report. If you use information provided to you by the manufacturer or supplier of the materials that was based on testing, you must keep the summary sheet of results provided to you by the manufacturer or supplier. You are not required to obtain the test report or other supporting

documentation from the manufacturer or supplier. (40 CFR 63.3930(b))

- 4) For each compliance period, the records specified in paragraphs §63.3930 (c)(1), (c)(2) and (c)(3) as follows: (40 CFR 63.3930(c))
 - (a) A record of the coating operations on which you used each compliance option and the time periods (beginning and ending dates and times) for each option you used. (40 CFR 63.3930(c)(1))
 - (b) For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 2 of §63.3941. (40 CFR 63.3930(c)(2))
 - (c) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emission for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of §63.3951; and, if applicable, the calculation used to determine mass of organic HAP in waste material according to §63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of §63.3951; and the calculation of each 12-month organic HAP emission rate using Equation 3 of §63.3951. (40 CFR 63.3930(c)(3))
- 5) A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. (40 CFR 63.3930(d))
- 6) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period unless the material is tracked by weight. (40 CFR 63.3930(e))
- 7) A record of the volume fraction of coating solids for each coating used during each compliance period. (40 CFR 63.3930(f))
- 8) If you use either the emission rate without add-on controls or the emission rate with add-on controls compliance option, the density for each coating, thinner and/or other additive, and cleaning material used during each compliance period. (40 CFR 63.3930(g))
- 9) If you use an allowance in Equation 1 of §63.3951 for organic HAP contained in waste materials sent to or designated for

shipment to a treatment, storage, and disposal facility (TSDF) according to §63.3951(e)(4), you must keep records of the information specified in paragraphs (h)(1) through (3) of §63.3930 as follows: (40 CFR 63.3930(h))

- (a) The name and address of each TSDF to which you sent waste materials for which you use an allowance in Equation 1 of §63.3951; a statement of which subparts under 40 CFR parts 262, 264, 265, and 266 apply to the facility; and the date of each shipment. (40 CFR 63.3930(h)(1))
 - (b) Identification of the coating operations producing waste materials included in each shipment and the month or months in which you used the allowance for these materials in Equation 1 of §63.3951. (40 CFR 63.3930(h)(2))
 - (c) The methodology used in accordance with §63.3951(e)(4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment. (40 CFR 63.3930(h)(3))
- 10) The owner or operator shall keep records of the date, time, and duration of each deviation. (40 CFR 63.3930(j))
- iv. The owner or operator shall keep records in the form and time period as the following:
- 1) The owner or operator must keep records in a form suitable and readily available for expeditious review, according to §63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database. (40 CFR 63.3931(a))
 - 2) As specified in 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.3931(b))
 - 3) The owner or operator must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to

§63.10(b)(1). You may keep the records off-site for the remaining 3 years. (40 CFR 63.3931(c))

- v. The owner or operator shall maintain a copy of the Material Safety Data Sheet (MSDS) for each HAP-containing material used as this plant. (Regulation 2.16, section 4.1.9)

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

HAP

i. Notifications

- 1) *General.* You must submit the notifications in §§63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in paragraphs (b) and (c) of this section. (40 CFR 63.3910(a)) (See Comment 4)
- 2) *Initial Notification.* You must submit the initial notification required by §63.9(b) for a new or reconstructed affected source no later than 120 days after initial startup or 120 days after January 2, 2004, whichever is later. (40 CFR 63.3910(b))
- 3) *Notification of compliance status.* You must submit the notification of compliance status required by §63.9(h) no later than 30 calendar days following the end of the initial compliance period described in §63.3940, 63.3950, or 63.3960 that applies to your affected source. The notification of compliance status must contain the information in §63.9(h) and the following:
 - (a) Company name and address.
 - (b) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
 - (c) Date of the report and beginning and ending dates of the reporting period. The reporting period is the initial compliance period described in §§63.3940, 63.3950, or 63.3960 that applies to your affected source.
 - (d) Identification of the compliance option or options specified in §63.3891 that you used on each coating operation in the affected source during the initial compliance period.
 - (e) Statement of whether or not the affected source achieved

the emission limitations for the initial compliance period.

- (f) If you had a deviation, include the information in paragraphs (c)(6)(i) and (ii) of this section.
- (i) A description and statement of the cause of the deviation.
 - (ii) If you failed to meet the applicable emission limit in §63.3890, include all the calculations you used to determine the kg (lb) of organic HAP emitted per liter (gal) coating solids used. You do not need to submit information provided by the materials' suppliers or manufacturers, or test reports.
- (g) For each of the data items listed in paragraphs (c)(7)(i) through (iv) of this section that is required by the compliance option(s) you used to demonstrate compliance with the emission limit, include an example of how you determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to §63.3941(a), (b), or (c). You do not need to submit copies of any test reports.
- (i) Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material.
 - (ii) Volume fraction of coating solids for one coating.
 - (iii) Density for one coating, one thinner and/or other additive, and one cleaning material, except that if you use the compliant material option, only the example coating density is required.
 - (iv) The amount of waste materials and the mass of organic HAP contained in the waste materials for which you are claiming an allowance in Equation 1 of §63.3951.
- (h) The calculation of kg (lb) of organic HAP emitted per liter (gal) coating solids used for the compliance option(s) you used, as specified in paragraphs (c)(8)(i) through (iii) of this section.
- (i) For the compliant material option, provide an example calculation of the organic HAP content for one coating, using Equation 2 of §63.3941.
 - (ii) For the emission rate without add-on controls

option, provide the calculation of the total mass of organic HAP emissions for each month; the calculation of the total volume of coating solids used each month; and the calculation of the 12-month organic HAP emission rate using Equations 1 and 1A through 1C, 2, and 3, respectively, of §63.3951.

- ii. *Semiannual compliance reports.* You must submit semiannual compliance reports for each affected source according to the requirements of paragraphs (a)(1) through (7) of this section.
 - 1) *Dates.* Unless the Administrator has approved or agreed to a different schedule for submission of reports under §63.10(a), you must prepare and submit each semiannual compliance report according to the dates specified in paragraphs (a)(1)(i) through (iv) of this section. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation. (See Comment 3)
 - (a) The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period described in §63.3940, §63.3950, or §63.3960 that applies to your affected source and ends on June 30 or December 31, whichever date is the first date following the end of the initial compliance period.
 - (b) Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
 - (c) Each semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
 - 2) *Inclusion with Title V report.* Each affected source that has obtained a Title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in 40 CFR Part 63, Subpart M in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a semiannual compliance report pursuant to §63.3920 along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the semiannual

compliance report includes all required information concerning deviations from any emission limitation in Subpart M MMM, its submission will be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a semiannual compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority. (40 CFR 63.3920(a)(2)) (See Comment 3)

- 3) *General Requirements.* The semiannual compliance report must contain the information specified in paragraphs (a)(3)(i) through (vii) of §63.3920, and the information specified in paragraphs (a)(4) through (7) and (c)(1) of section §63.3920 that is applicable to your affected source as follows: (40 CFR 63.3920(a)(3))
 - (a) Company name and address. (40 CFR 63.3920(a)(3)(i))
 - (b) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. (40 CFR 63.3920(a)(3)(ii))
 - (c) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation. (40 CFR 63.3920(a)(3)(iii))
 - (d) Identification of the compliance option or options specified in §63.3891 that you used on each coating operation during the reporting period. If you switched compliance options during the reporting period, you must report the beginning and ending dates for each option you used. (40 CFR 63.3920(a)(3)(iv))
 - (e) If you used the emission rate without add-on controls or the emission rate with add-on controls compliance option (§63.3891(b) or (c)), the calculations result for each rolling 12-month organic HAP emission rate during the 6-month reporting period. (40 CFR 63.3920(a)(3)(v))
- 4) *No deviations.* If there were no deviations from the emission limitations in §63.3890, §63.3892, and §63.3893 that apply to you, the semiannual compliance report must include a statement that

there were no deviations from the emission limitations during the reporting period. (40 CFR 63.3920(a)(4))

- 5) *Deviations: Compliant material option.* If you used the compliant material option and there was a deviation from the applicable organic HAP content requirements in §63.3890, the semiannual compliance report must contain the following information: (40 CFR 63.3920(a)(5))
- (a) Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used. (40 CFR 63.3920(a)(5)(i))
 - (b) The calculation of the organic HAP content (using Equation 2 of §63.3941) for each coating identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports). (40 CFR 63.3920(a)(5)(ii))
 - (c) The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports). (40 CFR 63.3920(a)(5)(iii))
 - (d) A statement of the cause of each deviation. (40 CFR 63.3920(a)(5)(iv))
- 6) *Deviations: Emission rate without add-on controls option.* If you used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in §63.3890, the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (iii) of section 63.3920 as follows: (40 CFR 63.3920(a)(6))
- (a) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in §63.3890. (40 CFR 63.3920(a)(6)(i))
 - (b) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the

deviation occurred. You must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of §63.3951; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4). You do not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports). (40 CFR 63.3920(a)(6)(ii))

- (c) A statement of the cause of each deviation. (40 CFR 63.3920(a)(6)(iii))

Comments

1. The surface coating facility at BAE Systems is identified as an existing source. According to 40 CFR 63.3882: An affected source is a new affected source if it commenced its construction after August 13, 2002 and the construction is a completely new miscellaneous metal parts and products surface coating facility where previously no miscellaneous metal parts and products surface coating facility had existed. An affected source is existing if it is not new or reconstructed.
2. 40 CFR Part 63, Subpart M MMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Parts and Products establishes three options to demonstrate compliance with the organic HAP emission standards in accordance with §63.3891: *Compliant Material Option*, *Emission Rate without Add-on Controls Option*, and *Emission Rate with Add-on Controls Option*. The paint booths are not equipped with any add-on controls for HAP, BAE Systems may select to demonstrate compliance with either Compliant Material Option or Emission Rate without Add-on Controls Option.
3. In accordance with 40 CFR Part 63, Subpart M MMM, section 63.3920(a)(1) and 63.3920(a)(1)(iv), BAE Systems may submit their Subpart M MMM semiannual compliance reports on the same schedule as the Title V operating permit reporting requirements.
4. BAE Systems submitted an initial notification and notification of compliance status on June 10, 2010.

Appendix B - Protocol Checklist for Performance Test

A completed protocol should include the following information:

- 1. Facility name, location, and ID #;
- 2. Responsible Official and environmental contact names;
- 3. Permit numbers which are requiring the test to be conducted;
- 4. Test methods to be used (i.e. EPA Method 1, 2, 3, 4, and 5);
- 5. Alternative test methods or description of modifications to the test methods to be used;
- 6. Purpose of the test including equipment, and pollutant to be tested; the purpose may be described in the permit which requires the test to be conducted or may be to show compliance with a federal regulation or emission standard;
- 7. Tentative test dates (these may change but the District will need final notice at least 10 days in advance of the actual test dates in order to arrange for observation);
- 8. Maximum rated production capacity of the system;
- 9. Production-rate goal planned during the performance test for demonstration of compliance (if appropriate based on limits);
- 10. Method to be used for determining rate of production during the performance test;
- 11. Method to be used for determining rate of production during subsequent operations of the process equipment to demonstrate compliance;
- 12. Description of normal operation cycles;
- 13. Discussion of operating conditions that tend to cause worse case emissions; it is especially important to clarify this if worst case emissions do not come from the maximum production rate;
- 14. Process flow diagram;
- 15. List the type and manufacturer of the control equipment if any;
- 16. List the control equipment (baghouse, scrubber, condenser, etc.) parameter to be monitored and recorded during the performance test; note that this date will be used to ensure representative operation during subsequent operations. These parameters can include pressure drops, flow rates, pH, and temperature. The values achieved during the test may be required during subsequent operations to describe what pressure drops, etcetera, are indicative of good operating performance; and
- 17. How quality assurance and accuracy of the data will be maintained, including;
 - Sample identification and chain-of-custody procedures;
 - Are audit samples required for this test Method (EPA contact number for audit samples 919-541-1062) if yes then please make samples available to the District for observation during the stack test;
 - Audit sample provider;

- Number of audit samples to be used:
- 18. Pipe, duct, stack, or flue diameter to be tested;
- 19. Distances from the testing sample ports to the nearest upstream and downstream flow disturbances such as bends, valves, constrictions, expansions, and exit points for outlet and additionally for inlet;
- 20. Determine number of traverse points to be tested for outlet and additionally for inlet if required using Appendix A-1 to 40 CFR Part 60;
 - Method 1 if stack is >12"
 - Method 1a if stack is between 4" and 12"
 - Alternate method of determination for <4"
 - If a sample location at least two stack or duct diameters downstream and half a diameter upstream from any flow disturbance is not available then an alternative procedure is available for determining the acceptability of a measurement location. This procedure described in Section 11.5 allows for the determination of gas flow angles at the sampling points and comparison of the measured results with acceptability criteria.

[End of Document]