

PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY OPERATING PERMIT NUMBER 825



**LEARJET, INC.
1255 EAST AERO PARK BOULEVARD
TUCSON, ARIZONA 85706-9279**

Effective: December 19, 2001

Expires: December 18, 2006

Permit Number 825
 Learjet, Inc.
 1255 E. Aero Park Boulevard
 Tucson, Arizona 85706-9279

SUMMARY

The Learjet, Inc. - Tucson facility (hereafter referred to as "the facility") performs completions, modifications, maintenance, and repairs on light to medium classes of business aircraft. Activities at the facility include the painting and depainting of aircraft, installation/remodeling of aircraft interiors, fueling/defueling, and general aircraft maintenance and repair. Two categories of aircraft are serviced at the facility. "Green" aircraft are new aircraft that are assembled at other locations and arrive at the facility without complete interiors or exterior paint. These aircraft are completed for final delivery to customers and receive interior installations and exterior surface coatings to customer specifications. "Other" aircraft are complete upon arrival and may receive a range of services from simple refueling to complete depainting and repainting, interior remodeling, general repairs and maintenance, and defueling/refueling. Operations at the facility are conducted on five overlapping 8-hour shifts per day, 365 days per year.

Table I summarizes the potential to emit of the facility with the federally enforceable controls contained in the permit. These figures were taken from the information contained in the application dated November 25, 1997 (as supplemented and amended since that date), from the significant revision application dated June 29, 2001, from the minor permit revision dated December 21, 2001, and from standard emission factors in the U.S.EPA's document entitled "Compilation of Air Pollutant Emission Factors" (AP-42, Volume I). These figures are for information purposes only, are used to establish baseline emissions for the source, and are not intended to be enforceable emission limits.

Table I
 Potential-to-Emit (Tons per Year)

Pollutant	Fugitives	Non-Fugitives	Total Emissions
Nitrogen Oxides	None	64.0	64.0
Carbon Monoxide	None	55.3	55.3
Particulate Matter (PM ₁₀)	None	9.2	9.2
Sulfur Dioxide	None	43.5	43.5
Volatile Organic Compounds	36.9	162.3	199.2
Hazardous Air Pollutants	1.8	124.1	125.9

The facility is a major source of VOC and total HAPs. It is also a major source of a single HAP (e.g. methyl ethyl ketone). The facility is a synthetic minor source of NO_x and CO based on the 500 operating hour per year limitation on the emergency generators and the fire pump engines and a true minor source of SO₂ and PM₁₀.

The source has the capability to operate its facility such that various MACT requirements would be applicable. The permit identifies the various scenarios that the source may use in the functional areas identified in the MACT. Each of the scenarios has been defined by specifying of what it consists and to which MACT functional area it applies. For example, Alternate Operating Scenario #2 (AOS #2) for Spray Gun Cleaning Operations is specified as the disassembling of the spray gun and the cleaning of the components by hand in a vat that is closed at all times except when in use. These alternate operating scenarios, tabulated in Table II, is included in this Summary section. Table II provides a number for the alternate operating scenario, identifies to which functional MACT area it belongs, and provides the applicable Part B sections that describe the standards, testing, monitoring, recordkeeping, and reporting

provisions that apply to that scenario. Additionally, each Part B Section addressing standards, testing, monitoring, recordkeeping and reporting that applies only to an alternate operating scenario has been identified as to which specific alternate operating scenario it applies. Finally, the permit requires the Permittee to maintain a log, at each location or operation where an alternate operating scenario may be employed, that specifies which alternate operating scenario was in use and for which times (see Part B, IV.A.9). The Table of Alternate Operating Scenarios follows:

Table II
Aerospace MACT Affected Sources
Normal and Alternate Operating Scenarios
Applicable Requirements

Affected Sources	Applicable Permit Sections in Part B
I. All scenarios, activities and operations	
All scenarios	I.A.1, I.A.2, I.A.3, I.A.4, I.A.5, I.A.14, II.A, II.B, II.J, II.K, III.A.6, IV.A.1 and 2, IV.A.8 and 9, V.A.7 through 12, VI.A.16 through 19.
II. Cleaning operations	
A. Hand-wipe cleaning	
1. All scenarios and operations	I.A.9.a, I.A.9.b, I.A.9.e, II.C, IV.A.3, V.A.3
2. Normal Operating Scenario: Meet one of the composition requirements in Table I.	I.A.9.b(1), VI.A.1
3. Alternate Operating Scenario #1: Use only VOC and HAP containing solvents having a composite vapor pressure of 45mm Hg (24.1 inches H ₂ O) or less at 20°C (68°F).	I.A.9.b(2), VI.A.2
4. Alternate Operating Scenario #2: Demonstrate that the volume of hand-wipe solvents used has been reduced by at least 60% from a baseline adjusted for production.	I.A.9.b(3)
B. Spray Gun Cleaning	
1. All scenarios and operations	I.A.9.c, I.A.9.c(5), II.C, IV.A.3, V.A.3
2. Normal Operating Scenario: Clean the spray gun in an enclosed system.	I.A.9.c(1), III.A.1
3. Alternate Operating Scenario #1: Clean the spray gun by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place.	I.A.9.c(2)
4. Alternate Operating Scenario #2: Disassemble the spray gun and clean the components by hand in a vat that is closed at all times except when in use.	I.A.9.c(3)
5. Alternate Operating Scenario #3: Clean the spray gun by forcing the cleaning solvent through the gun and direct the resulting spray into a waste container fitted with a device designed to capture the atomized cleaning solvent emissions.	I.A.9.c(4)
C. Flush Cleaning	
Normal Operating Scenario: Empty the used	I.A.9.d, II.C, IV.A.3, V.A.3

cleaning solvent each time components are flush cleaned.	
III. Primer and Topcoat Application Operations	
A. All scenarios and operations	I.A.10.b, I.A.10.f, V.A.1 and 2, V.A.4, VI.A.9
B. Organic HAP and VOC Emissions	
1. Normal Operating Scenario: Uncontrolled coatings used that comply with the organic HAP and VOC content limits specified.	I.A.10.a, I.A.10.c, I.A.10.e(1), II.D.1, II.D.3.a, II.D.3.c, II.D.3.d, II.D.4.a, II.D.4.c, II.D.4.d, IV.A.4.a through c, VI.A.3, VI.A.5
2. Alternate Operating Scenario #1: Uncontrolled coatings HAP and VOC limits are averaged using the averaging scheme specified.	I.A.10.e(2), I.A.8, II.D.1, IV.A.4.d, VI.A.4, VI.A.6
3. Alternate Operating Scenario #2: Use a carbon adsorber with a HAP and VOC control efficiency of 81% or greater.	I.A.6, I.A.10.d, II.D.2, II.D.3.b, II.D.4.b, III.A.2, III.A.2.a, III.A.2.c through g, IV.A.4.f, VI.A.7
4. Alternate Operating Scenario #3: Use a control device, other than a carbon adsorber, with a HAP and VOC control efficiency of 81% or greater.	I.A.6, I.A.10.d, II.D.2, II.D.3.b, II.D.4.b, III.A.2, III.A.2.c through g, III.A.2.h through l, IV.A.4.e, VI.A.8
C. Inorganic HAP Emissions (existing sources)	
1. All scenarios and operations	I.A.10.g(1), I.A.10.g(3), I.A.10.g(4), II.E, III.A.3
2. Normal Operating Scenario: Pass the air stream through a dry particulate filter certified to meet the efficiencies listed in the specified Tables.	I.A.10.g(2)(a)(i), I.A.10.(g)(2)(c), IV.A.5.a and c, VI.A.15
3. Alternate Operating Scenario #1: Pass the air stream through a waterwash system.	I.A.6, I.A.10.g(2)(a)(ii), I.A.10.(g)(2)(d), III.A.3, IV.A.5.b and c
4. Alternate Operating Scenario #2: Pass the air stream through an approved control device.	I.A.6, I.A.10.g(2)(a)(iii), III.A.3
D. Inorganic HAP Emissions (new sources)	
1. All scenarios and operations	I.A.10.g(3), I.A.10.g(4), II.E
2. Normal Operating Scenario: Pass the air stream through a dry particulate filter certified to meet the efficiencies listed in the specified Tables.	I.A.10.g(2)(b)(i), I.A.10.(g)(2)(c), III.A.3, IV.A.5.a and c, VI.A.15
3. Alternate Operating Scenario #1: Pass the air stream through an approved control device.	I.A.6, I.A.10.g(2)(b)(ii), III.A.3, IV.A.5.c.
IV. Depainting Operations	
A. All scenarios and operations	I.A.11.a, I.A.11.b(1) and (3), II.G, III.A.4 and 5, IV.A.6.d through g, V.A.1 and 2, V.A.5 a and b, V.A.5.c(3), VI.A.10
B. Normal Operating Scenario: Emit no organic HAP from chemical stripping formulations and agents or chemical paint softeners.	I.A.11.b(1), I.A.11.b(3), IV.A.6.a
C. (Reserved)	(Reserved)
D. Alternate Operating Scenario #2: Use a control system on new sources that controls organic HAP emissions by at least 95%.	I.A.6, I.A.11.b(2) and (4), I.A.11.c(2), I.A.11.c(3), II.F, III.A.2, III.A.2.c through g, III.A.2.h through l, IV.A.6.b and c, V.A.5.c(1) and (2), VI.A.7 and 8
V. Chemical Milling Maskant Application Operations	
A. All scenarios and operations	I.A.12.a, I.A.12.b, II.H.1, V.A.6.d through f

B. Normal Operating Scenario (uncontrolled maskants): Use maskants that comply with the HAP and VOC limits specified.	I.A.12.c, I.A.12.e, II.H.3.a, IV.A.7.a and b, V.A.6.a and b, VI.A.11 through 14
C. Alternate Operating Scenario #1 (controlled maskants): Use a control system that reduces organic HAP and VOC emissions by at least 81%.	I.A.6, I.A.12.d, II.H.2, II.H.3.b, III.A.2.c through g, III.A.2.h through l, IV.A.7.c and d, V.A.6.b and c, VI.A.7 and 8
VI. Handling and Storage of Waste	
A. Normal Operating Scenario: Handle and transfer waste in a manner that minimizes spills.	I.A.13, II.I

All terms and conditions of this permit are federally enforceable unless specifically indicated otherwise.

Frequent use is made of the federal rule language at 40 CFR Part 63, Subpart GG, revised as of July 1, 2000 as amended (60FR45956, Sep 1, 1996, 61FR66227, Dec 17, 1996, 63FR15016, Mar 27, 1998, 63FR46532, Sep 1, 1998, and 65FR76945, Dec 8, 2000) within this Permit. In cases where the Permit language references the federal rule, and the Permit language differs from federal rule, the federal rule shall take precedence.

Table III
 Summary of Permit Requirements
 Learjet, Inc. - Permit Number 825
 (References to PCC are references to Title 17 of the Pima County Code)

Emission Unit	Pollutants Emitted	Control Measures	Emission Limits/Standards	Monitoring	Recordkeeping/Reporting	Testing Frequency/Methods
Equipment and activities subject to 40 CFR Part 63 Subpart GG (National Emission Standards for Aerospace Manufacturing and Rework Facilities) as of July 1, 2000 (and FR notices)	VOC, HAPs, and Particulate	Good housekeeping practices, use of compliant coatings, use of averaging techniques, enclosed systems, fume incinerators, catalytic incinerators, carbon adsorbers, non-regenerative carbon adsorbers, dry particulate filters, waterwash controls, or equivalent control.	(as listed by category)	(as listed by category)	(as listed by category)	Composition determinations (per manufacturer's supplied data as required. Vapor pressure determinations (ASTM E 260-91) as required. Uncontrolled compliant primers and topcoats: If no exempt solvents, total VOC and HAP content from manufacturer's data or EPA Method 24. Calculate mass of VOC and Hap emitted per unit volume of coating. Uncontrolled averaged primers and topcoats: Determine total VOC and organic HAP weight fraction of each applied coating each month. Determine volume of each coating applied each month.
I. Cleaning Operations						
a. Housekeeping			Store solvent laden applicators and fresh and spent solvents in closed containers. Minimize spills when handling and transferring solvents. Use conforming solvents			
b. Hand-wipe cleaning						
c. Spray gun cleaning	Clean in an enclosed system Nonatomized cleaning Hand clean disassembled gun parts Atomized cleaning only if directed into a waste container	Visually inspect seals and other potential sources for leaks at least monthly.	Record all leaks. Report use of unapproved cleaning method. Report instances where leaking cleaner remains in use.			

d. Flush cleaning	Empty the used solvent after each flush unless container is closed or equipped with an emission control device.	None	None	Determine the density of each coating applied each month. Calculate the volume weighted average of VOC and organic Hap emitted each 30-day period.
e. Primer and topcoat application operations.	<p>Minimize spills when handling and transferring primers and topcoats.</p> <p>For uncontrolled coatings Use conforming coatings with limited VOC and HAP content</p> <p>For controlled coatings Reduce VOC and HAP emissions by at least 81%</p> <p>Use approved averaging techniques for VOC and HAP content limits</p> <p>Use approved application equipment</p> <p>For inorganic HAP emissions Apply in booth or hangar with airflow directed downward Control with dry particulate filter, waterwash system or equivalent.</p> <p>Maintain system in good working order.</p>	<p>For dry particulate filter, install a differential pressure gauge across the filter banks. Continuously monitor the pressure drop across the filter banks and read that pressure drop at least once per shift.</p> <p>For waterwash systems, install a monitoring device to continuously monitor the water flow rate and read it at least once per shift.</p>	<p>Record the pressure drop across the dry particulate filter at least once per shift. Record the water flow rate to a waterwash system at least once per shift. Record name, VOC, and HAP content of each primer and topcoat. Record monthly mass of VOC and HAP emitted per unit volume of coating. Record purchases of "low HAP coatings". Record control efficiencies of control devices. Record temperatures of incinerators. Record accuracy certifications. Record carbon bed replacements. Record pressure drops across filter banks. Record water flow rates to waterwash systems.</p>	<p>Overall VOC and/or organic HAP control efficiency - carbon adsorber: Determine capture efficiency. Determine control efficiency (EPA Methods 18 or 25A). Alternatively, calculate material balance for VOC and HAPs.</p> <p>Overall VOC and/or organic HAP control efficiency - other than carbon adsorber: Determine gas volumetric flow rate using Method 2, 2A, 2B, 2C, or 2D. Determine TOC or total organic HAP (Method 18 or 301). Determine removal efficiency.</p>

f. Depainting operations	<p>No organic HAP emissions allowed from non-HAP strippers.</p> <p>For inorganic HAP emissions from dry media blasting: Conduct in an enclosed area. Use dry filtering or waterwash control system.</p> <p>For organic HAP emissions, reduce organic HAP emissions by at least 95% for new sources.</p>	<p>For a dry particulate filter, install a differential pressure gauge to continuously monitor the pressure drop across the filter banks. Read the pressure drop at least once per shift.</p> <p>For a waterwash system, install a device to continuously monitor the water flow rate. Read that flow at least once per shift.</p>	<p>Record pressure drop or water flow rate at least once per shift. Record name of each chemical stripper, monthly volume or weight of each organic HAP used, control device efficiency, carbon bed replacement, names and types of nonchemical equipment used, and periods of malfunctions and actions taken. For spot stripping and decal removal, record amount of organic HAP used, average volume of the HAP used, number of aircraft stripped, and all calculations used.</p>	<p>Spot stripping and decal removal: Determine annual volume of organic HAPs used. Determine annual total number of aircraft stripped. Determine annual volume or weight of HAPs emitted per aircraft.</p> <p>Uncontrolled compliant chemical milling maskants: Determine total VOC and organic HAP weight fraction of each applied coating each month. Determine volume of each coating applied each month.</p>
g. Chemical milling and maskant application operations	<p>Minimize spills when handling and transferring maskants.</p> <p>For uncontrolled maskant operations, use conforming maskants limiting VOC and HAPs.</p> <p>For controlled maskants, reduce VOC and HAP emissions by at least 81%</p>		<p>Record monthly mass or weighted average of maskants used. If controlled, record control efficiency, carbon bed replacement, firebox temperature, or firing temperature.</p>	<p>Determine the density of each coating applied each month. Calculate volume weighted average of VOC and organic HAP emitted each 30-day period.</p>

h. Handling and storage of waste.		Minimize spills when handling and transferring wastes.	None	None	Uncontrolled averaged chemical milling maskants: Determine total VOC and organic HAP weight fraction of each applied coating each month.
i. Operations and maintenance.		Operate and maintain all sources and control equipment in a manner consistent with minimizing emissions. Maintain a startup, shutdown, and malfunction plan, if required.		Record occurrence of each startup, shutdown, or malfunction of process or air pollution control equipment, maintenance on control equipment, periods of CMS malfunction, required measurements needed to demonstrate compliance, results of performance tests, CMS calibration checks, all adjustments and maintenance on CMS, all documentation supporting initial and ongoing compliance notifications, all applicability determinations.	Determine volume of each coating applied each month. Determine the density of each coating applied each month. Calculate the volume weighted average of VOC and organic Hap emitted each 30-day period. Inorganic HAP emissions - dry particulate filter: Certify control efficiency (Method 319). Tests required within 180 days of initial startup, effective date of a new relevant standard, or relevant compliance date.

Emission Unit	Pollutants Emitted	Control Measures	Emission Limits/Standards	Monitoring	Recordkeeping/Reporting	Testing Frequency/Methods
Stationary rotating machinery (i.e., all stationary and portable internal combustion engines operating within the facility) [SIP Rule 321, SIP Rule 332 and PCC 17.16.340]	PM ₁₀	None.	E=1.02Q ^{0.769} or E=17.0Q ^{0.432}	<p>Monitor daily the sulfur content and lower heating value of the fuel being fired.</p> <p>Monitor the opacity of the specifically identified units at least quarterly.</p> <p>Monitor the monthly operating hours for the specifically identified engines.</p>	<p>Maintain records of the sulfur content and lower heating value of the fuels being used as follows:</p> <ol style="list-style-type: none"> 1. For natural gas, maintain a copy of the FERC approved tariff agreement, and, 2. For all other fuels, maintain a copy of the fuel vendor supplied data sheet specifying the sulfur content and lower heating value of the specific fuel. <p>For the specifically identified unit, maintain an operating log specifying operating hours. Sum the hours each month to calculate a 12-month rolling total of operating hours.</p> <p>Report any daily period when the sulfur content of the fuel exceeded 0.8%.</p>	<p>SO₂ and PM₁₀ tests are not normally required.</p> <p>EPA Test Method 9 shall be used to monitor compliance with the opacity standard.</p>
	Visible Emissions (opacity)		40% except for periods not to exceed 10 consecutive seconds.			
	SO ₂		60% for cold equipment or when accelerated under load. Use of high sulfur fuel is prohibited			
	CO, NO _x , VOC, and HAPs		Specifically identified units limited to only certain allowed fuels and no more than 500 hours of operation per 12-month rolling total.			

Emission Unit	Pollutants Emitted	Control Measures	Emission Limits/Standards	Monitoring	Recordkeeping/Reporting	Testing Frequency/Methods
Fossil-fuel fired steam generators and general fuel burning equipment [SIP Rule 321 and PCC 17.16.160]	PM ₁₀ and Visible Emissions (opacity)	None	E=1.02Q ^{0.769} Or E=17.0Q ^{0.432} 40% opacity.	Fuel monitoring required. At least quarterly opacity monitoring for boilers rated at 1,000,000 Btu/hr or more and firing liquid or solid fuel.	Maintain records of the type of fuel combusted in each unit that does not combust natural gas exclusively. Record results of the quarterly opacity monitoring.	SO ₂ and PM ₁₀ tests are not normally required for units combusting natural gas exclusively. EPA Test Method 9 shall be used to monitor compliance with the opacity standard.
	SO ₂		Use of high sulfur oil is prohibited.			
	NO _x , VOC and HAPs		None.			

Emission Unit	Pollutants Emitted	Control Measures	Emission Limits/Standards	Monitoring	Recordkeeping/Reporting	Testing Frequency/Methods
Fuel storage tanks [SIP Rule 314, SIP Rule 344, PCC 17.16.230, and PCC 17.16.430.D]	VOC and HAPs	Submerged fill tube Leak free mechanical seals or the equivalent	Emissions may not cause "air pollution".	Maintain a file of the type of petroleum liquid stored, typical Reid vapor pressure and dates of storage.	Record storage tank I.D., date of fuel delivery, type and amount of fuel delivered, typical Reid vapor pressure of the fuel, and the dates storage tank is empty.	Not required.
Surface coating operations [PCC 17.16.400]	VOC and HAPs	Keeping containers covered and leak-free. Use of enclosures and filters when spray painting.	Control evaporation and leakage. Paint overspray controlled at 96%. No photochemically reactive solvents allowed in any architectural coating. Limits on VOC content for coating of miscellaneous metal parts and products.	Monitor VOC and HAP content of each coating and solvent product used by the Permittee and by any vendors contracted by the Permittee for work other than spot painting. Monitor the monthly amount of each coating and solvent product used.	Maintain a file of MSDS sheets (or equivalent manufacturer's product specification sheet) for each coating and solvent product used by the Permittee excluding spot painting conducted by vendors. Architectural coatings and solvents to be readily identifiable by the Permittee upon the control officer's request. Record the amounts of each coating and solvent product used each month.	Not required.

Emission Unit	Pollutants Emitted	Control Measures	Emission Limits/Standards	Monitoring	Recordkeeping/Reporting	Testing Frequency/Methods
Demolition/Renovation [PCC 17.16.530.A.8]	Asbestos.	As required by rule.	As required by rule.	Relevant paperwork on file.	Relevant paperwork on file.	Not required.
Nonvehicle air conditioner maintenance and/or service [40 CFR 82, Subpart F]	Ozone depleting substances.	As required by rule.	As required by rule.	Relevant paperwork on file.	Relevant paperwork on file.	Not required.
All activities and operations [SIP Rule 321, SIP Rule 343, SIP Rule 344, PCC 17.16.040, PCC 17.16.050, PCC 17.16.430.D, and PCC 17.16.430.G]	Visible emissions.	As previously listed.	Opacity 40% (or lower as previously indicated). Visible emissions may not cross a property line without imposition of an appropriate control.	As previously listed.	Recordkeeping and reporting as previously listed. Report excess emissions and permit deviations. Semiannual reports of required monitoring. Semiannual compliance certifications. Annual emissions inventory report upon request of the control officer.	EPA Test Method 9 shall be used to monitor compliance with the opacity standard.
	All pollutants		Control of odors and "air pollution".			

TABLE OF CONTENTS

Part "A": General Provisions.....	15
I. Permit Expiration and Renewal.....	15
II. Compliance with Permit Conditions.....	15
III. Permit Revision, Reopening, Revocation and Reissuance, or Termination for Cause	15
IV. Posting of Permit.....	16
V. Fee Payment.....	16
VI. Annual Emissions Inventory Questionnaire.....	16
VII. Compliance Certification	17
VIII. Certification of Truth, Accuracy and Completeness.....	17
IX. Inspection and Entry	17
X. Permit Revision Pursuant to Federal Hazardous Air Pollutant Standard.....	18
XI. Reporting of Excess Emissions, Permit Deviations, and Emergencies	18
XII. Record Keeping Requirements.....	21
XIII. Reporting Requirements	21
XIV. Duty to Provide Information	21
XV. Permit Amendment or Revision	22
XVI. Facility Change Without Permit Revision	22
XVII. Testing Requirements	23
XVIII. Property Rights.....	24
XIX. Severability Clause.....	24
XX. Permit Shield.....	25
XXI. Accident Prevention Requirements Under the Clean Air Act (CAA Section 112(r))	25
 Part "B": Specific Conditions.....	 26
I. Emission Limits and Standards	26
II. Compliance Determinations.....	53
III. Monitoring Requirements	63
IV. Recordkeeping Requirements.....	73
V. Reporting requirements.....	86
VI. Testing Requirements	99
 Part "C": Applicable Regulations	 127
 Part "D": Equipment List	 129

Permit Issued To: Learjet, Inc.

Permit Number: 825

PART A: GENERAL PROVISIONS

(References to PCC are references to Title 17 of the Pima County Code)

- I. **PERMIT EXPIRATION AND RENEWAL** [A.R.S. § 49-480.A., PCC 17.12.160.C.2., and PCC 17.12.180.A.1.]
- A. This permit is valid for a period of five years from the date of issuance of the permit.
- B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not greater than 18 months prior to the date of permit expiration.
- II. **COMPLIANCE WITH PERMIT CONDITIONS** [PCC 17.12.180.A.8.]
- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
- B. Need to halt or reduce activity not a defense. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- III. **PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE** [PCC 17.12.180.A.8.c. and PCC 17.12.270.]
- A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination; or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- B. The permit shall be reopened and revised under any of the following circumstances:
1. Additional applicable requirements under the Act become applicable to a major source. Such reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to PCC 17.12.280. Any permit reopening required pursuant to this paragraph shall comply with provisions in PCC 17.12.280 for permit renewal and shall reset the five-year permit term.
 2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.

3. The control officer or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 4. The control officer or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.
- C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance. Such reopenings shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in paragraph III.B.1 of this Part shall not result in the resetting of the five-year permit term.

IV. POSTING OF PERMIT [PCC 17.12.080.]

- A. Permittee shall post such permit, or a certificate of permit issuance on location where the equipment is installed in such a manner as to be clearly visible and accessible. All equipment covered by the permit shall be clearly marked with one of the following:
1. Current permit number.
 2. Serial number or other equipment number that is also listed in the permit to identify that piece of equipment.
- B. In the event that the equipment is so constructed or operated that such permit cannot be so placed, the permit shall be mounted so as to be clearly visible in an accessible place within a reasonable distance of the equipment or maintained readily available at all times on the operating premises.
- C. A copy of the complete permit shall be kept on the site.

V. FEE PAYMENT [PCC 17.12.180.A.9. and PCC 17.12.510.]

Permittee shall pay fees to the control officer pursuant to A.R.S. § 49-480.D and PCC 17.12.510.

VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE [PCC 17.12.320.]

- A. When requested by the control officer, the Permittee shall complete and submit an annual emissions inventory questionnaire. The questionnaire is due by March 31 or ninety days after the control officer makes the request and provides the inventory form each year, whichever occurs later, and shall include emission information for the previous calendar year.
- B. The questionnaire shall be on a form provided by or approved by the control officer and shall include the information required by PCC 17.12.320.

VII. COMPLIANCE CERTIFICATION [PCC 17.12.180.A.5. and PCC 17.12.210.A.2.]

Permittee shall submit to the control officer a compliance certification that describes the compliance status of the source with respect to each permit condition. Certifications shall be submitted as specified in Part “B” of this permit.

- A. The compliance certification shall include the following:
 - 1. Identification of each term or condition of the permit that is the basis of the certification;
 - 2. Compliance status of each applicable requirement;
 - 3. Whether compliance was continuous or intermittent;
 - 4. Method(s) used for determining the compliance status of the source, currently and over the reporting period;
 - 5. A progress report on all outstanding compliance schedules submitted pursuant to Section XI.C of this Part.
- B. A copy of all compliance certifications for Class I permits shall also be submitted to the EPA Administrator.

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS [PCC 17.12.210.A.3.]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required by this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

IX. INSPECTION AND ENTRY [PCC 17.12.210.A.4.]

The Permittee shall allow the control officer or the authorized representative of the control officer upon presentation of proper credentials to:

- A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- E. Record any inspection by use of written, electronic, magnetic and photographic media.

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD [PCC 17.12.160.C.4.]

If this source becomes subject to a standard promulgated by the Administrator pursuant to section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

XI. REPORTING OF EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCIES [PCC 17.12.180.A.5.b, PCC 17.12.180.E.3.d, PCC 17.28.065, and A.A.C. 18-2-310]

A. EXCESS EMISSIONS REPORTING

1. Excess emissions as defined in PCC 17.04.340.A.78. shall be reported as follows:
 - a. The Permittee shall report to the control officer any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:
 - (1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from paragraph b. of this subsection.
 - (2) Detailed written notification within 72 hours of the notification pursuant to subparagraph (1) of this paragraph.
 - b. Report shall contain the following information:
 - (1) Identity of each stack or other emission point where the excess emissions occurred.
 - (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.
 - (3) Date, time and duration or expected duration of the excess emissions.
 - (4) Identity of the equipment from which the excess emissions emanated.
 - (5) Nature and cause of such emissions.
 - (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions.
 - (7) Steps taken to limit the excess emissions. If the source's permit contains procedures governing source operation during

periods of start-up or malfunction and the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.

2. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsection A.3.a.(2) of this Section.
3. It shall be the burden of the Permittee to demonstrate, through submission of the data and information required by this section, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of excess emissions.

B. PERMIT DEVIATIONS REPORTING

1. A deviation means any situation in which an emissions unit fails to meet a permit term or condition. A deviation is not always a violation. A deviation can be determined through observation or through review of data obtained from any testing, monitoring, or recordkeeping established in this permit. For a situation lasting more than 24 hours which constitutes a deviation, each 24-hour period is considered a separate deviation. Included in the meaning are any of the following:
 - a. A condition where emissions exceeded an emission limitation or standard;
 - b. A condition where process or control device parameter values demonstrate that an emission limitation or standard has not been met;
 - c. Any other condition in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit.
2. Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the control officer by certified mail, facsimile, or hand delivery within two working days of the time when the Permittee first learned of the occurrence of the deviations.
3. All instances of deviations from permit requirements shall be clearly identified in the required semiannual monitoring report specified in Attachment "B", Section III.B, and shall be certified by the responsible official.

C. EMERGENCY PROVISION

1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Paragraph 3 of this section are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The Permittee shall submit notice of the emergency to the control officer by certified mail, facsimile or hand delivery within 2 working days of the time when emission limitations were exceeded due to an emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

- D. For any excess emission or permit deviation that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the control officer within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.
[A.R.S. 49-480.F.5.]

XII. RECORD KEEPING REQUIREMENTS

[PCC 17.12.180.A.4.]

- A. Permittee shall keep records of all required monitoring information including, but not limited to, the following:
 - 1. The date, place as defined in the permit, and time of sampling or measurements;
 - 2. The date(s) analyses were performed;
 - 3. The name of the company or entity that performed the analyses;
 - 4. A description of the analytical techniques or methods used;
 - 5. The results of such analyses; and
 - 6. The operating conditions as existing at the time of sampling or measurement.
- B. Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

XIII. REPORTING REQUIREMENTS

[PCC 17.12.180.A.5.a.]

Permittee shall comply with all of the reporting requirements of this permit. These include all of the following:

- A. Compliance certifications pursuant to Part “A”, Section VII of this permit.
- B. Permit deviation reporting pursuant to Part “A”, Sections XI.A, XI.B, and XI.C of this permit.
- C. Reporting requirements listed in Part “B” of this permit.

XIV. DUTY TO PROVIDE INFORMATION [PCC 17.12.160.G. and PCC 17.12.180.A.8.e.]

- A. The Permittee shall furnish to the control officer, within a reasonable time, any information that the control officer may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the control officer copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee, for Class I sources, shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.
- B. If the Permittee has failed to submit any relevant facts or if the Permittee has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

XV. PERMIT AMENDMENT OR REVISION

[PCC 17.12.240., PCC 17.12.250., and PCC 17.12.260.]

Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVI, as follows:

- A. Administrative Permit Amendment (PCC 17.12.240.);
- B. Minor Permit Revision (PCC 17.12.250.);
- C. Significant Permit Revision (PCC 17.12.260.).

The applicability and requirements for such action are defined in the above referenced regulations.

XVI. FACILITY CHANGE WITHOUT PERMIT REVISION

[PCC 17.12.230.]

- A. Permittee may make changes at the permitted source without a permit revision if all of the following apply:
 - 1. The changes are not modifications under any provision of Title I of the Act or under A.R.S. § 49-401.01(17).
 - 2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions.
 - 3. The changes do not violate any applicable requirements or trigger any additional applicable requirements.
 - 4. The changes satisfy all requirements for a minor permit revision under PCC 17.12.250.
 - 5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of subsections (A) and (C) of this Section.
- C. For each such change under subsections A and B of this Section, a written notice by certified mail or hand delivery shall be received by the control officer and, for Class I permits, the Administrator, a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change but must be provided as far in advance of the change as possible or, if advance notification is not practicable, as soon after the change as possible. Each notification shall include:
 - 1. When the proposed change will occur.
 - 2. A description of each such change.

3. Any change in emissions of regulated air pollutants.
4. The pollutants emitted subject to the emissions trade, if any.
5. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade.
6. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply.
7. Any permit term or condition that is no longer applicable as a result of the change.

XVII. TESTING REQUIREMENTS

[PCC 17.12.050.]

A. Operational Conditions During Testing

Tests shall be conducted while the unit is operating at full load under representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the control officer, testing may be performed at a lower rate. Operations during start-up, shutdown, and malfunction (as defined in PCC 17.04.340.A.) shall not constitute representative operational conditions unless otherwise specified in the applicable requirement.

B. Test Plan

At least 14 calendar days prior to performing a test, the Permittee shall submit a test plan to the control officer, in accordance with PCC 17.12.050.B. and the Arizona Testing Manual. This test plan must include the following:

1. test duration;
2. test location(s);
3. test method(s); and
4. source operation and other parameters that may affect test results.

C. Stack Sampling Facilities

Permittee shall provide or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platforms;
3. Safe access to sampling platforms; and
4. Utilities for sampling and testing equipment.

D. Interpretation of Final Results

Each performance test shall consist of three separate runs using the required test method. Each run shall be conducted in accordance with the applicable standard and test method. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. If a sample is accidentally lost or conditions occur which are not under the Permittee's control and which may invalidate the run, compliance may, upon the control officer's approval, be determined using the arithmetic mean of the other two runs.

E. Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the control officer within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and PCC 17.12.050.A.

F. Cessation of Testing After the First Run Has Started

If the control officer or the control officer's designee is not present, tests may only be stopped for good cause. Good cause includes, forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other conditions beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation that demonstrates good cause must be submitted.

XVIII. PROPERTY RIGHTS

[PCC 17.12.180.A.8.d.]

This permit does not convey any property rights of any sort, or any exclusive privilege.

XIX. SEVERABILITY CLAUSE

[PCC 17.12.180.A.7.]

The provisions of this permit are severable. If any provision of this permit is held invalid, the remainder of this permit shall not be affected thereby.

XX. PERMIT SHIELD

[PCC 17.12.310.]

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Part "C" of this permit. The permit shield shall not apply to any change made pursuant to Section XV.B of this Part and Section XVI of this Part.

XXI. ACCIDENT PREVENTION REQUIREMENTS UNDER THE CLEAN AIR ACT (CAA Section 112(r))

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the accidental release prevention regulations in Part 68, then the Permittee shall submit a risk management plan (RMP) by the date specified in Section 68.10 and shall certify compliance with the requirements of Part 68 as part of the semiannual compliance certification as required by 40 CFR Part 70 and Part "B" of this permit.

Part "B": SPECIFIC CONDITIONS
Air Quality Control Permit No. 825
For
Learjet, Inc.

I. Emission Limitations and Standards.

A. The requirements of I.A, II, III.A, IV.A, V.A, and VI.A of this Part apply to facilities that are engaged, either in part or in whole, in the manufacture or rework of commercial, civil, or military aerospace vehicles or components and that are major sources of hazardous air pollutants. [40 CFR, §63.741(a)]

1. Affected Sources. The affected sources to which the provisions of I.A, II, III.A, IV.A, V.A, and VI.A apply are as follows: [40 CFR, §63.741(c)]

a. Each cleaning operation as follows:

- (1) All hand-wipe cleaning operations constitute an affected source. Hand-wipe cleaning operations occur facility-wide.
- (2) Each spray gun cleaning operation constitutes an affected source. Spray gun cleaning operations occur facility-wide.
- (3) All flush cleaning operations constitute an affected source. Flush cleaning operations occur facility-wide.

b. For organic HAP or VOC emissions, each primer application operation, which is the total of all primer applications at the facility. Primer application operations occur in Buildings E, K, and Y.

c. For organic HAP or VOC emissions, each topcoat application operation, which is the total of all topcoat applications at the facility. Topcoat application operations occur in Buildings E, K, and Y.

d. For organic HAP or VOC emissions, each depainting operation, which is the total of all depainting at the facility. Depainting operations occur in Buildings F and Y.

e. Each chemical milling maskant application operation, which is the total of all chemical milling maskant applications at the facility. The Permittee shall identify to the control officer the locations where chemical milling maskant operations occur prior to the time the operation commences.

f. Each waste storage and handling operation, which is the total of all waste handling and storage at the facility. Waste storage and handling operations occur facility-wide.

g. For inorganic HAP emissions, each spray booth or hangar that contains a primer or topcoat application operation subject to I.A.10.g or a depainting operation subject to I.A.11.b.(4). New paint booths subject to

this provision include Paint Booths #1, #2, and #3 in Building E, Paint Booth #1 in Building K, and the paint booth in Building Y. Existing paint booths subject to this provision include Paint Booth #4 in Building E.

- h. Where a dispute arises relating to the applicability of this Permit to a specific activity, the Permittee shall demonstrate whether or not the activity is regulated under this Permit.
2. This Permit (Sections I.A., II, III.A., IV.A., V.A., and VI.A) does not contain control requirements for use of specialty coatings, adhesives, adhesive bonding primers, or sealants at aerospace facilities. It also does not regulate research and development, quality control, and laboratory testing activities, chemical milling, metal finishing, electrodeposition (except for electrodeposition of paints), composites processing (except for cleaning and coating of composite parts or components that become part of an aerospace vehicle or component as well as composite tooling that comes in contact with such composite parts or components prior to cure), electronic parts and assemblies (except for cleaning and topcoating of completed assemblies), manufacture of aircraft transparencies, and wastewater operations at aerospace facilities. These requirements do not apply to the rework of aircraft or aircraft components if the holder of the Federal Aviation Administration (FAA) design approval, or the holder's licensee, is not actively manufacturing the aircraft or aircraft components. These requirements also do not apply to parts and assemblies not critical to the vehicle's structural integrity or flight performance. The requirements of this Permit also do not apply to primers, topcoats, chemical milling maskants, strippers, and cleaning solvents containing HAP and VOC at concentrations less than 0.1 percent for carcinogens or 1.0 percent for noncarcinogens, as determined from manufacturer's representations. [40 CFR, §63.741(f)]
3. The requirements for primers, topcoats, and chemical milling maskants in I.A.10 and I.A.12 do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at a facility does not exceed 189 l (50 gal), and the combined annual total of all such primers, topcoats, and chemical milling maskants used at a facility does not exceed 757 l (200 gal). Primers and topcoats exempted under I.A.2 and under I.A.10.f.(3) and I.A.10.g.(4) are not included in the 50 and 200 gal limits. Chemical milling maskants exempted under I.A.12.c.(3) are also not included in these limits. [40 CFR, §63.741(g)]
4. Any waterborne coating for which the manufacturer's supplied data demonstrate that organic HAP and VOC contents are less than or equal to the organic HAP and VOC content limits for its coating type, as specified in I.A.10.c and I.A.12.c, is exempt from the following requirements of this Part: I.A.10.d and e, I.A.12.d and e, II.D and H, VI.A.3 through 8 and 11 through 13, IV.A.4 and 7, and V.A.4 and 6. The Permittee shall maintain the manufacturer's supplied data and annual purchase records for each exempt waterborne coating readily available for inspection and review and shall retain these data for 5 years. [40 CFR, §63.741(i)]
5. Circumvention. The Permittee shall not build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise

constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to: [40 CFR, §63.4(b)]

- a. The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere;
 - b. The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions; and
 - c. The fragmentation of an operation such that the operation avoids regulation by a relevant standard.
6. Startup, shutdown, and malfunction plan. If the Permittee uses an air pollution control device or equipment to control HAP emissions, then the Permittee shall prepare and operate in accordance with a startup, shutdown, and malfunction plan in accordance with I.A.14.c. Dry particulate filter systems operated per the manufacturer's instructions are exempt from a startup, shutdown, and malfunction plan. A startup, shutdown, and malfunction plan shall be prepared for facilities using locally prepared operating procedures. In addition to the information required in I.A.14.c, this plan shall also include the following provisions: [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #2 and #3, Primer and Topcoat Operations, Inorganic HAP Emissions from Existing Sources, AOS #1 and #2, Primer and Topcoat Operations, Inorganic HAP Emissions from New Sources, AOS #1, Depainting Operations, AOS #2, and Chemical Milling and Maskant Application Operations, AOS #1] [40 CFR, §63.743(b)]
- a. The plan shall specify the operation and maintenance criteria for each air pollution control device or equipment and shall include a standardized checklist to document the operation and maintenance of the equipment;
 - b. The plan shall include a systematic procedure for identifying malfunctions and for reporting them immediately to supervisory personnel; and
 - c. 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.
7. If the Permittee uses an air pollution control device or equipment not listed in 40 CFR Part 63, Subpart GG, then the Permittee shall submit a description of the device or equipment, test data verifying the performance of the device or equipment in controlling organic HAP and/or VOC emissions, as appropriate, and specific operating parameters that will be monitored to establish compliance with the standards to the Administrator for approval not later than 120 days prior to the compliance date. [40 CFR, §63.743(c)]
8. Instead of complying with the individual coating limits in I.A.10 and I.A.12, the Permittee may choose to comply with the averaging provisions specified as

follows: [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #1] [40 CFR, §63.743(d)]

- a. The Permittee shall use any combination of primers, topcoats (including self-priming topcoats), Type I chemical milling maskants, or Type II chemical milling maskants such that the monthly volume-weighted average organic HAP and VOC contents of the combination of primers, topcoats, Type I chemical milling maskants, or Type II chemical milling maskants, as determined in accordance with the applicable procedures set forth in VI.A, complies with the specified content limits in I.A.10.c and I.A.12.c.
- b. Averaging is allowed only for uncontrolled primers, topcoats (including self-priming topcoats), Type I chemical milling maskants, or Type II chemical milling maskants.
- c. Averaging is not allowed between primers and topcoats (including self-priming topcoats).
- d. Averaging is not allowed between Type I and Type II chemical milling maskants.
- e. Averaging is not allowed between primers and chemical milling maskants, or between topcoats and chemical milling maskants.
- f. Each averaging scheme shall be approved in advance by the control officer and adopted as part of the facility's Title V permit. An averaging scheme shall be approved by the control officer before this alternate operating scenario is employed by the Permittee.

9. Standards. Cleaning Operations. [40 CFR, §63.744]

- a. Housekeeping measures. The Permittee shall comply with the requirements in these paragraphs unless the cleaning solvent used is identified in Table 1 of I.A.9 of this Part or contains HAP and VOC below the de minimis levels specified in I.A.2. [40 CFR, §63.744(a)]
 - (1) Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement.
 - (2) Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers.

- (3) Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.
- b. Hand-wipe cleaning. For each hand-wipe cleaning operation (excluding cleaning of spray gun equipment performed in accordance with I.A.9.c), the Permittee shall use cleaning solvents that meet one of the requirements specified in I.A.9.b(1), (2), and (3). Cleaning solvent solutions that contain HAP and VOC below the de minimis levels specified in I.A.2 are exempt from the requirements in I.A.9.b(1), (2), and (3). [40 CFR, §63.744(b)]
- (1) Meet one of the composition requirements in Table 1 of I.A.9.e of this Part; or,
 - (2) [Applicable to Cleaning Operations, Hand-Wipe Cleaning, AOS #1] Have a composite vapor pressure of 45 mm Hg (24.1 in. H₂O) or less at 20°C (68°F); or
 - (3) [Applicable to Cleaning Operations, Hand-Wipe Cleaning, AOS #2] Demonstrate that the volume of hand-wipe solvents used in cleaning operations has been reduced by at least 60% from a baseline adjusted for production. The baseline shall be established as part of an approved alternative plan administered by the permitting authority. Demonstrate that the volume of hand-wipe cleaning solvents used in cleaning operations has been reduced by at least 60 percent from a baseline adjusted for production. The baseline shall be calculated using data from 1996 and 1997, or as otherwise agreed upon by the Administrator or delegated permitting authority. The baseline shall be approved by the Administrator or delegated permitting authority and shall be included as part of the facility's Title V or Part 70 permit. Prior to the time this alternate operating scenario is to be employed, the Permittee shall identify and submit to the permitting authority the specific production adjusted baseline value that the Permittee intends to use.
- c. Spray gun cleaning. For each spray gun cleaning operation in which spray guns are used for the application of coatings or any other materials that require the spray guns to be cleaned, the Permittee shall use one or more of the techniques, or their equivalent, specified in I.A.9.c.(1) through (4). Spray gun cleaning operations using cleaning solvent solutions that contain HAP and VOC below the de minimis levels specified in I.A.2 are exempt from the requirements in I.A.9.c.(1) through (4). [40 CFR, §63.744(c)]
- (1) General.
 - (a) Enclosed system. Clean the spray gun in an enclosed system that is closed at all times except when inserting

or removing the spray gun. Cleaning shall consist of forcing solvent through the gun. [Material Permit Condition]

- (b) If leaks are found during the monthly inspection required in III.A.1, repairs shall be made as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15th day after detection, the cleaning solvent shall be removed, and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued.
 - (2) Nonatomized cleaning. Clean the spray gun by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place. No atomizing air is to be used. Direct the cleaning solvent from the spray gun into a vat, drum, or other waste container that is closed when not in use. [Applicable to Cleaning Operations, Spray Gun Cleaning, AOS #1]
 - (3) Disassembled spray gun cleaning. Disassemble the spray gun and clean the components by hand in a vat, which shall remain closed at all times except when in use. Alternatively, soak the components in a vat, which shall remain closed during the soaking period and when not inserting or removing components. [Applicable to Cleaning Operations, Spray Gun Cleaning, AOS #2]
 - (4) Atomizing cleaning. Clean the spray gun by forcing the cleaning solvent through the gun and direct the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions. [Material Permit Condition] [Applicable to Cleaning Operations, Spray Gun Cleaning, AOS #3]
 - (5) Cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that can be programmed to spray into a closed container, shall be exempt from the requirements of I.A.9.c.
- d. Flush cleaning. For each flush cleaning operation (excluding those in which Table 1 of I.A.9 or semi-aqueous cleaning solvents are used), the Permittee shall empty the used cleaning solvent each time aerospace parts or assemblies, or components of a coating unit (with the exception of spray guns) are flush cleaned into an enclosed container or collection system that is kept closed when not in use or into a system with equivalent emission control.
 - e. Exempt cleaning operations. The following cleaning operations are exempt from the requirements of I.A.9.b of this Part:

- (1) Cleaning during the manufacture, assembly, installation, maintenance, or testing of components of breathing oxygen systems that are exposed to the breathing oxygen;
- (2) Cleaning during the manufacture, assembly, installation, maintenance, or testing of parts, subassemblies, or assemblies that are exposed to strong oxidizers or reducers (e.g., nitrogen tetroxide, liquid oxygen, or hydrazine);
- (3) Cleaning and surface activation prior to adhesive bonding;
- (4) Cleaning of electronic parts and assemblies containing electronic parts;
- (5) Cleaning of aircraft and ground support equipment fluid systems that are exposed to the fluid, including air-to-air heat exchangers and hydraulic fluid systems;
- (6) Cleaning of fuel cells, fuel tanks, and confined spaces;
- (7) Surface cleaning of solar cells, coated optics, and thermal control surfaces;
- (8) Cleaning during fabrication, assembly, installation, and maintenance of upholstery, curtains, carpet, and other textile materials used in the interior of the aircraft;
- (9) Cleaning of metallic and nonmetallic materials used in honeycomb cores during the manufacture or maintenance of these cores, and cleaning of the completed cores used in the manufacture of aerospace vehicles or components;
- (10) Cleaning of aircraft transparencies, polycarbonate, or glass substrates;
- (11) Cleaning and cleaning solvent usage associated with research and development, quality control, and laboratory testing;
- (12) Cleaning operations, using nonflammable liquids, conducted within five feet of energized electrical systems. Energized electrical systems means any AC or DC electrical circuit on an assembled aircraft once electrical power is connected, including interior passenger and cargo areas, wheel wells and tail sections; and
- (13) Cleaning operations identified as essential uses under the Montreal Protocol for which the Administrator has allocated essential use allowances or exemptions in 40 CFR §82.4.

Table 1. Composition Requirements for Approved Cleaning Solvents	
Cleaning Solvent Type	Composition Requirements

Aqueous	Cleaning solvents in which water is the primary ingredient (80 percent of cleaning solvent solution as applied must be water). Detergents, surfactants, and bioenzyme mixtures and nutrients may be combined with the water along with a variety of additives, such as organic solvents (e.g., high boiling point alcohols), builders, saponifiers, inhibitors, emulsifiers, pH buffers, and antifoaming agents. Aqueous solutions must have a flash point greater than 93°C (200°F) (as reported by the manufacturer), and the solution must be miscible with water.
Hydrocarbon-based	Cleaners that are composed of photochemically reactive hydrocarbons and/or oxygenated hydrocarbons and have a maximum vapor pressure of 7 mm Hg at 20°C (3.75 in. H ₂ O and 68°F). These cleaners also contain no HAP.

10. Standards. Primer and Topcoat Application Operations. [40 CFR, §63.745]

- a. The Permittee shall comply with the requirements specified in I.A.10.c for those coatings that are uncontrolled (no control device is used to reduce organic HAP emissions from the operation), and in paragraph I.A.10.d for those coatings that are controlled (organic HAP emissions from the operation are reduced by the use of a control device). Aerospace equipment that is no longer operational, intended for public display, and not easily capable of being moved is exempt from the requirements of this section and shall be identified to the control officer by the Permittee immediately upon meeting the qualifications of this exemption.
- b. The Permittee shall conduct the handling and transfer of primers and topcoats to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills. [40 CFR, §63.745(b)]
- c. Uncontrolled coatings. Organic HAP and VOC content levels. The Permittee shall comply with the organic HAP and VOC content limits specified in I.A.10.c.(1) through (4) for those coatings that are uncontrolled. [40 CFR, §63.745(c)]
 - (1) Organic HAP emissions from primers shall be limited to an organic HAP content level of no more than: 540 g/L (4.5 lb/gal) of primer (less water), as applied, for general aviation rework facilities; or 650 g/L (5.4 lb/gal) of exterior primer (less water), as applied, to large commercial aircraft components (parts or assemblies) or fully assembled, large commercial aircraft at existing affected sources that produce fully assembled, large commercial aircraft; or 350 g/L (2.9 lb/gal) of primer (less water), as applied.
 - (2) VOC emissions from primers shall be limited to a VOC content level of no more than: 540 g/L (4.5 lb/gal) of primer (less water and exempt solvents), as applied, for general aviation rework facilities; or 650 g/L (5.4 lb/gal) of exterior primer (less water and exempt solvents), as applied, to large commercial aircraft components (parts or assemblies) or fully assembled, large

commercial aircraft at existing affected sources that produce fully assembled, large commercial aircraft; or 350 g/L (2.9 lb/gal) of primer (less water and exempt solvents) as applied.

- (3) Organic HAP emissions from topcoats shall be limited to an organic HAP content level of no more than: 420 g/L (3.5 lb/gal) of coating (less water) as applied or 540 g/L (4.5 lb/gal) of coating (less water) as applied for general aviation rework facilities. Organic HAP emissions from self-priming topcoats shall be limited to an organic HAP content level of no more than: 420 g/L (3.5 lb/gal) of self-priming topcoat (less water) as applied or 540 g/L (4.5 lb/gal) of self-priming topcoat (less water) as applied for general aviation rework facilities.
 - (4) VOC emissions from topcoats shall be limited to a VOC content level of no more than: 420 g/L (3.5 lb/gal) of coating (less water and exempt solvents) as applied or 540 g/L (4.5 lb/gal) of coating (less water and exempt solvents) as applied for general aviation rework facilities. VOC emissions from self-priming topcoats shall be limited to a VOC content level of no more than: 420 g/L (3.5 lb/gal) of self-priming topcoat (less water and exempt solvents) as applied or 540 g/L (4.5 lb/gal) of self-priming topcoat (less water) as applied for general aviation rework facilities.
- d. Controlled coatings. Control system requirements. Each control system shall reduce the operation's organic HAP and VOC emissions to the atmosphere by 81% or greater, taking into account capture and destruction or removal efficiencies, as determined using the procedures in VI.A.7 when a carbon adsorber is used and in VI.A.8 when a control device other than a carbon adsorber is used. [Material Permit Condition] [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #2 and #3] [40 CFR, §63.745(d)]
- e. Compliance methods. Compliance with the organic HAP and VOC content limits specified in I.A.10.c.(1) through (4) shall be accomplished by using the methods specified in I.A.10.e.(1) and (2) either by themselves or in conjunction with one another. [40 CFR, §63.745(e)]
- (1) Use primers and topcoats (including self-priming topcoats) with HAP and VOC content levels equal to or less than the limits specified in I.A.10.c.(1) through (4); or
 - (2) Use the averaging provisions described in I.A.8. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #1]
- f. Application equipment. Except as provided in I.A.10.f.(3), for each application operation (including self-priming topcoat), in which any of the coatings contain organic HAP or VOC, the Permittee shall comply with the requirements specified in I.A.10.f.(1) and (2). [40 CFR, §63.745(f)]

- (1) All primers and topcoats (including self-priming topcoats) shall be applied using one or more of the application techniques specified in I.A.10.f.(1)(a) through (i).
 - (a) Flow/curtain coat application;
 - (b) Dip coat application;
 - (c) Roll coating;
 - (d) Brush coating;
 - (e) Cotton-tipped swab application;
 - (f) Electrodeposition (dip) coating;
 - (g) High volume low pressure (HVLP) spraying;
 - (h) Electrostatic spray application; or
 - (i) Other coating application methods that achieve emission reductions equivalent to HVLP or electrostatic spray application methods, as determined according to the requirements in VI.A.9.
- (2) All application devices used to apply primers or topcoats (including self-priming topcoats) shall be operated according to company procedures, local specified operating procedures, and/or the manufacturer's specifications, whichever is most stringent, at all times. Equipment modified by the Permittee shall maintain a transfer efficiency equivalent to HVLP and electrostatic spray application techniques.
- (3) The following situations are exempt from the requirements of I.A.10.f:
 - (a) Any situation that normally requires the use of an airbrush or an extension on the spray gun to properly reach limited access spaces;
 - (b) The application of coatings that contain fillers that adversely affect atomization with HVLP spray guns and that the permitting agency has determined cannot be applied by any of the application methods specified in I.A.10.f.(1). The Permittee shall identify to the control officer new areas that meet this provision before claiming this exemption.
 - (c) The application of coatings that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.)

and that the permitting agency has determined cannot be applied by any of the application methods specified in I.A.10.f.(1). The Permittee shall identify to the control officer new areas that meet this provision before claiming this exemption.

- (d) The use of airbrush application methods for stenciling, lettering, and other identification markings;
 - (e) The use of hand-held spray can application methods; and
 - (f) Touch-up and repair operations.
- g. Inorganic HAP emissions. Except as provided in paragraph I.A.10.g.(4), for any primer or topcoat application operation in which any of the coatings that are spray applied contain inorganic HAP, the Permittee shall comply with the applicable requirements in I.A.10.g.(1) through (3). [40 CFR, §63.745(g)]
- (1) Apply these coatings in a booth or hangar in which air flow is directed downward onto or across the part or assembly being coated and exhausted through one or more outlets.
 - (2) Control the air stream from this operation as follows: [Material Permit Condition]
 - (a) For existing sources (i.e., Paint Booth #4 in Building E), the Permittee must choose one of the following:
 - (i) Before exhausting it to the atmosphere, pass the air stream through a dry particulate filter system certified using the methods described in VI.A.15 to meet or exceed the efficiency data points in Tables 1 and 2 of I.A.10.g; or

Table 1.--Two-Stage Arrestor; Liquid Phase Challenge for Existing Sources	
Filtration Efficiency Requirement, %	Aerodynamic particle size range, µm
>90	>5.7
>50	>4.1
>10	>2.2

Table 2.--Two-Stage Arrestor; Solid Phase Challenge for Existing Sources	
Filtration Efficiency Requirement, %	Aerodynamic particle size range, µm
>90	>8.1
>50	>5.0
>10	>2.6

- (ii) Before exhausting it to the atmosphere, pass the air stream through a waterwash system that shall

remain in operation during all coating application operations; or [Applicable to Primer and Topcoat Operations, Inorganic HAP Emissions from Existing Sources, AOS #1]

(iii) Before exhausting it to the atmosphere, pass the air stream through an air pollution control system that meets or exceeds the efficiency data points in Tables 1 and 2 of I.A.10.g and has been approved by the permitting authority. [Applicable to Primer and Topcoat Operations, Inorganic HAP Emissions from Existing Sources, AOS #2]

(b) For new sources (i.e., Paint Booths #1, #2, and #3 in Building E, Paint Booth #1 in Building K, and the paint booth in Building Y) either:

(i) Before exhausting it to the atmosphere, pass the air stream through a dry particulate filter system certified using the methods described in VI.A.15 to meet or exceed the efficiency data points in Tables 3 and 4 of I.A.10.g; or

Table 3.--Three-Stage Arrestor; Liquid Phase Challenge for New Sources	
Filtration Efficiency Requirement, %	Aerodynamic particle size range, μm
>90	>2.0
>85	>1.0
>65	>0.42

Table 4.--Three-Stage Arrestor; Solid Phase Challenge for New Sources	
Filtration Efficiency Requirement, %	Aerodynamic particle size range, μm
>95	>2.5
>85	>1.1
>75	>0.70

(ii) Before exhausting it to the atmosphere, pass the air stream through an air pollution control system that meets or exceeds the efficiency data points in Tables 3 and 4 of I.A.10.g and has been approved by the permitting authority. [Applicable to Primer and Topcoat Operations, Inorganic HAP Emissions from New Sources, AOS #1]

(c) If a dry particulate filter system is used, the following requirements shall be met:

(i) Maintain the system in good working order;

- (ii) Install a differential pressure gauge across the filter banks;
 - (iii) Continuously monitor the pressure drop across the filter and read and record the pressure drop once per shift; and
 - (iv) Take corrective action when the pressure drop exceeds or falls below the filter manufacturer's recommended limit(s).
 - (d) If a conventional waterwash system is used, continuously monitor the water flow rate and read and record the water flow rate once per shift. If a pumpless system is used, continuously monitor the booth parameter(s) that indicate performance of the booth per the manufacturer's recommendations to maintain the booth within the acceptable operating efficiency range and read and record the parameters once per shift.
[Primer and Topcoat Operations, Inorganic HAP Emissions from Existing Sources, AOS #1]
- (3) If the pressure drop across the dry particulate filter system, as recorded pursuant to IV.A.5.a, is outside the limit(s) specified by the filter manufacturer or in locally prepared operating procedures, shut down the operation immediately and take corrective action. If the water path in the waterwash system fails the visual continuity/flow characteristics check, or the water flow rate recorded pursuant to IV.A.5.b exceeds the limit(s) specified by the booth manufacturer or in locally prepared operating procedures, or the booth manufacturer's or locally prepared maintenance procedures for the filter or waterwash system have not been performed as scheduled, shut down the operation immediately and take corrective action. The operation shall not be resumed until the pressure drop or water flow rate is returned within the specified limit(s).
- (4) The requirements of I.A.10.g.(1) through (3) do not apply to the following:
- (a) Touch-up of scratched surfaces or damaged paint;
 - (b) Hole daubing for fasteners;
 - (c) Touch-up of trimmed edges;
 - (d) Coating prior to joining dissimilar metal components;
 - (e) Stencil operations performed by brush or airbrush;

- (f) Section joining;
- (g) Touch-up of bushings and other similar parts;
- (h) Sealant detackifying;
- (i) Painting parts in an area identified in a Title V permit, where the permitting authority has determined that it is not technically feasible to paint the parts in a booth. The Permittee shall identify new areas to the control officer that fall under this provision before claiming this exemption; and
- (j) The use of hand-held spray can application methods.

11. Standards. Depainting Operations. [40 CFR, §63.746]

a. Applicability. The Permittee shall comply with the requirements in I.A.11.a.(1) through (3), and with the requirements specified in I.A.11.b where there are no controls for organic HAP, or I.A.11.c where organic HAP are controlled using a control system. This section does not apply to an aerospace manufacturing or rework facility that depaints six or less completed aerospace vehicles in a calendar year. [40 CFR, §63.746(a)]

- (1) The provisions of this section apply to the depainting of the outer surface areas of completed aerospace vehicles, including the fuselage, wings, and vertical and horizontal stabilizers of the aircraft, and the outer casing and stabilizers of missiles and rockets. These provisions do not apply to the depainting of parts or units normally removed from the aerospace vehicle for depainting. However, depainting of wings and stabilizers is always subject to the requirements of this section regardless of whether their removal is considered by the Permittee to be normal practice for depainting.
- (2) Aerospace vehicles or components that are intended for public display, no longer operational, and not easily capable of being moved are exempt from the requirements of this section and shall be identified to the control officer by the Permittee immediately upon meeting the qualifications of this exemption.
- (3) The following depainting operations are exempt from the requirements of this section:
 - (a) Depainting of radomes; and
 - (b) Depainting of parts, subassemblies, and assemblies normally removed from the primary aircraft structure before depainting.

b. General. [40 CFR, §63.746(b)]

- (1) HAP emissions--non-HAP chemical strippers and technologies. Except as provided in paragraphs I.A.11.b(2) and (3), the Permittee shall emit no organic HAP from chemical stripping formulations and agents or chemical paint softeners.
- (2) Where non-chemical based equipment is used to comply with I.A.11.b(1), either in total or in part, the Permittee shall operate and maintain the equipment according to the manufacturer's specifications or locally prepared operating procedures. During periods of malfunctions of such equipment, the Permittee may use substitute materials during the repair period provided the substitute materials used are those available that minimize organic HAP emissions. In no event shall substitute materials be used for more than 15 days annually, unless such materials are organic HAP-free. [Applicable to Depainting Operations, AOS #2]
- (3) The Permittee shall not, on an annual average basis, use more than 26 gallons of organic HAP-containing chemical strippers or alternatively 190 pounds of organic HAP per commercial aircraft depainted; or more than 50 gallons of organic HAP-containing chemical strippers or alternatively 365 pounds of organic HAP per military aircraft depainted for spot stripping and decal removal.
- (4) If the Permittee operates a new or existing depainting operation and is complying with I.A.11.b.(2), and the depainting operation generates airborne inorganic HAP emissions from dry media blasting equipment, then the Permittee shall also comply with the requirements specified in I.A.11.b.(4)(a) through (e). [Applicable to Depainting Operations, AOS #2]
 - (a) Perform the depainting operation in an enclosed area, unless a closed-cycle depainting system is used.
 - (b) General. [Material Permit Condition]
 - (i) For existing sources pass any air stream removed from the enclosed area or closed-cycle depainting system through a dry particulate filter system, certified using the method described in VI.A.15 to meet or exceed the efficiency data points in Tables 1 and 2 of I.A.10.g, through a baghouse, or through a waterwash system before exhausting it to the atmosphere.
 - (ii) For new sources pass any air stream removed from the enclosed area or closed-cycle depainting system through a dry particulate filter system certified using the method described in

VI.A.15 to meet or exceed the efficiency data points in Tables 3 and 4 of I.A.10.g or through a baghouse before exhausting it to the atmosphere. The Permittee shall notify the control officer of the installation or operation of any new source subject to this provision prior to employing this provision. The Permittee shall also specify in its notification whether a dry particulate filter or a baghouse shall be used.

- (c) If a dry particulate filter system is used, the following requirements shall be met:
 - (i) Maintain the system in good working order;
 - (ii) Install a differential pressure gauge across the filter banks; [Material Permit Condition]
 - (iii) Continuously monitor the pressure drop across the filter, and read and record the pressure drop once per shift; and
 - (iv) Take corrective action when the pressure drop exceeds or falls below the filter manufacturer's recommended limits.
- (d) If a waterwash system is used, continuously monitor the water flow rate, and read and record the water flow rate once per shift.
- (e) If the pressure drop, as recorded pursuant to IV.A.6.g, is outside the limit(s) specified by the filter manufacturer or in locally prepared operating procedures, whichever is more stringent, shut down the operation immediately and take corrective action. If the water path in the waterwash system fails the visual continuity/flow characteristics check, as recorded pursuant IV.A.6.g, or the water flow rate, as recorded pursuant to IV.A.5.b, exceeds the limit(s) specified by the booth manufacturer or in locally prepared operating procedures, or the booth manufacturer's or locally prepared maintenance procedures for the filter or waterwash system have not been performed as scheduled, shut down the operation immediately and take corrective action. The operation shall not be resumed until the pressure drop or water flow rate is returned within the specified limit(s).
- (f) Mechanical and hand sanding operations are exempt from the requirements in I.A.11.b.(4).

- c. Organic HAP emissions--organic HAP-containing chemical strippers. If an organic HAP-containing chemical stripper depainting operation is used, the Permittee shall comply with the requirements specified in I.A.11.c. [40 CFR, §63.746(c)]
- (1) (Reserved)
 - (2) Each control system installed on or after September 1, 1995 shall reduce organic HAP emissions to the atmosphere by 95 percent or greater. Reduction shall take into account capture and destruction or removal efficiencies, and may take into account the volume of chemical stripper used relative to baseline levels (e.g., the 95 percent efficiency may be achieved by controlling emissions at 81 percent efficiency with a control system and using 74 percent less stripper than in baseline applications). The baseline shall be calculated using data from 1996 and 1997, which shall be on a usage per aircraft or usage per square foot of surface basis. Prior to the time this alternate operating scenario is to be employed, the Permittee shall identify and submit to the permitting authority the specific production adjusted baseline value that the Permittee intends to use. [Material Permit Condition] [Applicable to Depainting Operations, AOS #2]
 - (3) The capture and destruction or removal efficiencies are to be determined using the procedures in VI.A.7 when a carbon adsorber is used and those in VI.A.8 when a control device other than a carbon adsorber is used. [Applicable to Depainting Operations, AOS #2]

12. Standards. Chemical Milling Maskant Application Operations. [40 CFR, §63.747]

- a. For each chemical milling maskant operation that is uncontrolled (no control device is used to reduce organic HAP emissions from the operation), the Permittee shall comply with the requirements specified in I.A.12.c. For each chemical milling maskant operation that is controlled (organic HAP emissions from the operation are reduced by the use of a control device), the Permittee shall comply with the requirements specified in I.A.12.d. [40 CFR, §63.747(a)]
- b. The Permittee shall conduct the handling and transfer of chemical milling maskants to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills. [40 CFR, §63.747(b)]
- c. Uncontrolled maskants--organic HAP and VOC content levels. The Permittee shall comply with the organic HAP and VOC content limits specified in I.A.12.c(1) and (2) for each chemical milling maskant that is uncontrolled. [40 CFR, §63.747(c)]
 - (1) Organic HAP emissions from chemical milling maskants shall be limited to organic HAP content levels of no more than 622 grams of organic HAP per liter (5.2 lb/gal) of Type I chemical

milling maskant (less water) as applied, and no more than 160 grams of organic HAP per liter (1.3 lb/gal) of Type II chemical milling maskant (less water) as applied.

- (2) VOC emissions from chemical milling maskants shall be limited to VOC content levels of no more than 622 grams of VOC per liter (5.2 lb/gal) of Type I chemical milling maskant (less water and exempt solvents) as applied, and no more than 160 grams of VOC per liter (1.3 lb/gal) of Type II chemical milling maskant (less water and exempt solvents) as applied.
 - (3) The requirements of I.A.12.c(1) and (2) do not apply to the following:
 - (a) Touch-up of scratched surfaces or damaged maskant; and
 - (b) Touch-up of trimmed edges.
- d. Controlled maskants--control system requirements. Each control system shall reduce the operation's organic HAP and VOC emissions to the atmosphere by 81% or greater, taking into account capture and destruction or removal efficiencies, as determined using the procedures in VI.A.7 when a carbon adsorber is used and in VI.A.8 when a control device other than a carbon adsorber is used. [Material Permit Condition][Applicable to Chemical Milling Maskant Application Operations, AOS #1] [40 CFR, §63.747(d)]
- e. Compliance methods. Compliance with the organic HAP and VOC content limits specified in I.A.12.c.(1) (2) may be accomplished by using the methods specified in paragraphs I.A.12.e.(1) and (2) either by themselves or in conjunction with one another. [40 CFR, §63.747(e)]
- (1) Use chemical milling maskants with HAP and VOC content levels equal to or less than the limits specified in I.A.12.c.(1) and (2).
 - (2) Use the averaging provisions described in I.A.8.
13. Standards: Handling and Storage of Waste. [40 CFR, §§63.741(e) and 63.748]
- Except for all wastes that are determined to be hazardous wastes under the Resource Conservation and Recovery Act of 1976 (RCRA) as implemented by 40 CFR Parts 260 and 261, and that are subject to RCRA requirements as implemented in 40 CFR Parts 262 through 268, the Permittee of a facility subject to this Permit that produces a waste that contains HAP shall conduct the handling and transfer of the waste to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills.
14. Operation and maintenance requirements. [40 CFR, §63.6(e)]

- a. General.
 - (1) At all times, including periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.
 - (2) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required in I.A.6.
 - (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.
- b. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator and control officer which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in I.A.6), review of operation and maintenance records, and inspection of the source.
- c. Startup, shutdown, and malfunction plan.
 - (1) The Permittee shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard. The plan shall identify all routine or otherwise predictable CMS malfunctions. This plan shall be developed by the Permittee by the source's compliance date for that relevant standard. The plan shall be incorporated by reference into the source's title V permit. The Permittee shall develop such a plan and make it available to the permitting agency before employing an alternate operating scenario that would require such a plan. The purpose of the startup, shutdown, and malfunction plan is to--
 - (a) Ensure that, at all times, the Permittee operates and maintains affected sources, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards;
 - (b) Ensure that the Permittee is prepared to correct malfunctions as soon as practicable after their

occurrence in order to minimize excess emissions of hazardous air pollutants; and

- (c) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).
- (2) During periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain such source (including associated air pollution control equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under I.A.14.c.
- (3) When actions taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the Permittee shall keep records for that event that demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping, that confirms conformance with the startup, shutdown, and malfunction plan for that event. In addition, the Permittee shall keep records of these events as specified in IV.A.7 (and elsewhere in this Part), including records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control equipment. Furthermore, the Permittee shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in V.A.8 and 9.
- (4) If an action taken by the Permittee during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the Permittee shall record the actions taken for that event and shall report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with V.A.8 and 9 (unless the Permittee makes alternative reporting arrangements, in advance, with the Administrator (see V.A.9)).
- (5) The Permittee shall keep the written startup, shutdown, and malfunction plan on record after it is developed to be made available for inspection, upon request, by the Administrator or control officer for the life of the affected source or until the affected source is no longer subject to the provisions of this

Permit. In addition, if the startup, shutdown, and malfunction plan is revised, the Permittee shall keep previous (i.e., superseded) versions of the startup, shutdown, and malfunction plan on record, to be made available for inspection, upon request, by the Administrator or control officer, for a period of 5 years after each revision to the plan.

- (6) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the Permittee may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection when requested by the Administrator or control officer.

B. Stationary Rotating Machinery. The provisions of this paragraph are applicable to all the stationary and portable internal combustion engines operating within the facility.

- 1. The Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any stationary rotating machinery in excess of the amounts calculated by one of the following equations:

- a. For equipment having a heat input rate of 4200 million Btu per hour or less, the maximum allowable emissions shall be determined by the following equation: [SIP Rule 332 and PCC 17.16.340.C]

$$E = 1.02Q^{0.769}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

Q = the heat input in million Btu per hour.

- b. For equipment having a heat input rate greater than 4200 million Btu/hr., the maximum allowable emissions shall be determined by the following equation:

$$E = 17.0Q^{0.432}$$

where "E" and "Q" have the same meaning as in I.E.1.a of this Part.

- c. The actual values shall be calculated from the applicable equations and rounded off to two decimal places. [PCC 17.16.340.D]

- 2. The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any stationary rotating machinery, smoke for any period greater than ten consecutive seconds which exceeds 40 percent opacity. Visible emissions when starting cold equipment shall be limited to 60 percent opacity for the first ten minutes and diesel engines accelerated under load shall be limited to 60 percent opacity. [SIP Rule 321 and PCC 17.16.340.E]

3. The Permittee is prohibited from firing any fuel in the 84Kw emergency generator, the 401 kW fire pump engines, the 380 kW (510 horsepower) fire pump engines, and the Kohler 235 kW (315 horsepower) emergency generator except JetA, natural gas, diesel fuel (i.e., diesel fuel oil numbers 2-D and 4-D as specified in ASTM D975-90), and vegetable oil/diesel mix. [Material Permit Condition] [PCC 17.12.220]
4. The Permittee is prohibited from using high sulfur fuel oil (i.e., fuel oil with a sulfur content of 0.9 percent or more by weight). [Not Federally Enforceable] [Material Permit Condition] [PCC 17.16.340.H]
5. When low sulfur oil is fired, the Permittee shall not allow emissions of sulfur dioxide to exceed 1.0 pound of sulfur dioxide per million Btu heat input. [Not Federally Enforceable] [PCC 17.16.340.H]
6. The Permittee shall not operate any of the following units more than 500 hours during any consecutive 12-month period. [Material Permit Condition] [PCC 17.12.220]

Emergency Generators and Fire Pump Engines		
Unit I.D.	Description	Capacity
N/A	Emergency Generator	84 kW
N/A	Fire Pump Engine	401 kW
N/A	Fire Pump Engine	401 kW
N/A	Fire Pump Engine	401 kW
N/A	Fire Pump Engine	380 kW
N/A	Fire Pump Engine	380 kW
N/A	Fire Pump Engine	380 kW
N/A	Fire Pump Engine	380 kW
N/A	Fire Pump Engine	380 kW
N/A	Emergency Generator	235 kW

C. Fossil-Fuel Fired Steam Generators and General Fuel Burning Equipment. The provisions of this paragraph are applicable to steam generators and general fuel burning equipment in which fuel is burned for the primary purpose of producing power, steam, hot water, hot air, or other liquids, gases, or solids and in which the products of combustion do not come in direct contact with process materials. [PCC 17.16.165.A]

1. The Permittee shall not cause, allow, or permit the emission of particulate matter in excess of the amounts calculated by one of the following equations:
 - a. For equipment having a heat input rate of 4200 million Btu per hour or less, the maximum allowable emissions shall be determined by the following equation: [SIP Rule 332 and PCC 17.16.165.C.1]

$$E=1.02Q^{0.769}$$
 Where:
 E=the maximum allowable particulate emissions rate in pounds-mass per hour.
 Q=the heat input in million Btu per hour.

- b. For equipment having a heat input rate of greater than 4200 million Btu per hour, the maximum allowable emissions shall be determined by the following equation: [SIP Rule 332 and PCC 17.16.165.C.2]

$$E=17.0Q^{0.432}$$

Where:

E=the maximum allowable particulate emissions rate in pounds-mass per hour.

Q=the heat input in million Btu per hour.

2. The Permittee shall not use high sulfur oil in any of the equipment described in I.C of this Part. [Not Federally Enforceable] [Material Permit Condition] [PCC 17.16.165.G]
3. When low sulfur oil is fired, fossil fuel fired industrial and commercial equipment installations shall not emit more than 1.0 pound of sulfur dioxide per million Btu heat input. [Not Federally Enforceable] [PCC 17.16.165.E]

D. Fuel Storage Tanks. [SIP Rule 314 and PCC 17.16.230]

1. No person shall place, store or hold in any reservoir, stationary tank or other container having a capacity of forty thousand (151,400 liters) or more gallons any petroleum liquid having a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere or is equipped with one of the following vapor loss control devices, properly installed, in operation, and in good working order: [Material Permit Condition]
- a. A floating roof consisting of a pontoon type double-deck type roof resting on the surface of the liquid contents and equipped with a closure seal to close the space between the roof eave and tank wall and a vapor balloon or vapor dome, designed in accordance with accepted standards of the petroleum industry. The control equipment shall not be used if the petroleum liquid has a vapor pressure of twelve pounds per square inch absolute or greater under actual conditions.
- (1) All tank gauging and sampling devices shall be gas tight except when gauging or sampling is taking place.
- (2) There shall be no visible holes, tears or other openings in the seal, or in any seal fabric. Where applicable, all openings except drains shall be equipped with a cover seal or lid. The cover seal or lid shall be in a closed position at all times, except when the device is in actual use.
- (3) Automatic bleeder vents shall be closed at all times, except when the roof is floated off or landed on the roof leg supports.

- (4) Rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports, or at the manufacturer's recommended setting.
 - b. Other equipment proven to be of equal efficiency for preventing discharge of hydrocarbon gases and vapors to the atmosphere.
 2. Any other petroleum liquid storage tank shall be equipped with a submerged filling device, or acceptable equivalent, for the control of hydrocarbon emissions. [Material Permit Condition]
 3. The Permittee shall not cause nor permit malodorous emissions to cross a property line without minimizing those emissions. [SIP Rule 344 and PCC 17.16.430.D]
 4. All pumps and compressors which handle volatile organic compounds shall be equipped with mechanical seals or other equipment of equal efficiency to prevent the release of organic contaminants into the atmosphere. [Not Federally Enforceable] [Material Permit Condition] [PCC 17.16.230.D]
- E. Surface Coating Operations.
1. The Permittee shall not transport or store volatile organic compounds without taking necessary and feasible measures to control evaporation, leakage, or other discharge into the atmosphere. [Not Federally Enforceable] [PCC 17.16.400.A]
 2. The Permittee shall not conduct any spray paint operations without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray. [Not Federally Enforceable][PCC 17.16.400.C]
 3. No person shall either: [Not Federally Enforceable] [PCC 17.16.400.C.2]
 - a. Employ, apply, evaporate or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or
 - b. Thin or dilute any architectural coating with a photochemically reactive solvent.
 4. For purposes of I.E.3, a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in subparagraphs a through c of this paragraph, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent: [PCC 17.16.400.C.3]
 - a. A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation -- hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: five percent.
 - b. A combination of aromatic compounds with eight or more carbon atoms to the molecule, except ethylbenzene: eight percent.

- c. A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.
 - d. Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described previously, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.
5. No Permittee engaged in the surface coating of miscellaneous metal parts and products may operate a coating application system subject to this Section that emits volatile organic compounds in excess of any of the following: [Not Federally Enforceable] [PCC 17.16.400.C.5]
- a. 4.3 pounds per gallon (0.5 kilograms per liter) of coating, excluding water, delivered to a coating applicator that applies clear coatings.
 - b. 3.5 pounds per gallon (0.42 kilograms per liter) of coating, excluding water delivered to a coating applicator in a coating application system that is air dried or forced warm air dried at temperatures up to 194°F (90°C).
 - c. 3.5 pounds per gallon (0.42 kilograms per liter) of coating, excluding water, delivered to a coating applicator that applies extreme performance coatings.
 - d. 3.0 pounds per gallon (0.36 kilograms per liter) of coating, excluding water, delivered to a coating applicator for all other coatings and coating application systems.
 - e. If more than one emission limitation previously described applies to a specific coating, then the least stringent emission limitation shall be applied.
 - f. All VOC emissions from solvent washings shall be considered in the emission limitations unless the solvent is directed into containers that prevent evaporation into the atmosphere.
- F. Abrasive Blasting Operations. Emissions from a sandblasting or other abrasive blasting operation must be minimized by applying water to suppress visible emissions (wet blasting) enclosing the operation, or use of other equivalently effective controls. [SIP rule 316 and PCC 17.16.100.D]
- G. Demolition/Renovation. The Permittee shall comply with all of the requirements of 40 CFR 61, Subpart M (National Emissions Standards for Hazardous Air Pollutants - Asbestos). [PCC 17.16.530.]
- H. Nonvehicle Air Conditioner Maintenance and/or Services. The Permittee shall comply with all of the requirements of 40 CFR 82, Subpart F (Protection of Stratospheric Ozone - Recycling and Emissions Reduction). [40 CFR 82, Subpart F]

I. All Activities and Operations.

1. The Permittee shall not cause or permit the effluent from a single emission point, multiply emissions point, or fugitive emissions source to have an average optical density greater than 40 percent subject to the following provisions: [SIP Rule 321 and PCC 17.16.040]
 - a. Opacities (optical densities) of an effluent shall be measured by a certified visible emissions evaluator with his natural eyes, approximately following the procedures which were used during his certification, or by an approved and precisely calibrated in-stack monitoring instrument.
 - b. A violation of an opacity standard shall be determined be by measuring and recording a set of consecutive, instantaneous opacities, and calculating the arithmetic average of the measurements within the set unless otherwise noted herein. The measurements shall be made at approximately fifteen-second intervals for a period of at least six minutes, and the number if required measurements shall be 25. Sets need not be consecutive in time, and in no case shall be two sets overlap. If the average opacity of the set of instantaneous measurements exceeds the maximum allowed by any rule, this shall constitute a violation.
 - c. The use of air or other gaseous diluents solely for the purpose of achieving compliance with an opacity standard on prohibited.
2. The Permittee shall not cause or permit the airborne diffusion of visible emissions beyond the property boundary line within which the emissions become airborne. [SIP Rule 343 and PCC 17.16.050]
 - a. Within actual practice, the airborne diffusion of visible emissions across property lines shall be prevented by appropriately controlling the emissions at the point of discharge, or ceasing entirely the activity or operation which is causing or contributing to the emissions.
 - b. The provisions of I.H.2 shall not apply when the naturally induced wind speed exceeds 25 miles per hour as estimated by a certified visible emissions evaluator using the Beaufort Scale of Wind-Speed equivalents, or as recorded by a U.S. weather Bureau Station or a U.S. government military installation.
 - c. Any disregard of, neglect of, or inattention to other controls required herein, during any time when the provisions of I.H.2 is in effect, shall automatically waive the exception, and such relaxation of controls shall be a violation.
3. The Permittee shall not emit gaseous or odorous materials from equipment, operations, or premises under his control in such quantities or concentrations as to cause air pollution. [SIP Rule 344 and PCC 17.16.430.D]

4. Where a stack, vent, or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor, or any combination thereof constituting air pollution are discharged to adjoining property, the control officer may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the Permittee to a degree that will adequately dilute, reduce, or eliminate the discharge of air pollution to adjoining property. [Not Federally Enforceable] [PCC 17.16.430.G]

II. Compliance Determinations for sources identified in I.A.1 of this Part:

- A. If the Permittee constructs or reconstructs a spray booth or hangar, the Permittee must comply with the new source requirements for inorganic HAP specified in I.A.10.g.(2)(b) and I.A.11.b.(4) for that new spray booth or hangar upon startup. [40 CFR, §63.749(a)(2)]
- B. General. The Permittee shall be considered in noncompliance if the Permittee fails to submit a startup, shutdown, and malfunction plan as required by I.A.6 or uses a control device other than one specified in this Permit that has not been approved by the Administrator, as required by I.A.7. [40 CFR, §63.749(b)]
- C. Cleaning operations. Each cleaning operation shall be considered in noncompliance if the Permittee fails to institute and carry out the housekeeping measures required under I.A.9.a. Incidental emissions resulting from the activation of pressure release vents and valves on enclosed cleaning systems are exempt from this paragraph. [40 CFR, §63.749(c)]
 1. Hand-wipe cleaning. An affected hand-wipe cleaning operation shall be considered in compliance when all hand-wipe cleaning solvents, excluding those used for hand cleaning of spray gun equipment under I.A.9.c.(3), meet either the composition requirements specified in I.A.9.b.(1) or the vapor pressure requirement specified in I.A.9.b.(2).
 2. Spray gun cleaning. An affected spray gun cleaning operation shall be considered in compliance when each of the following conditions is met:
 - a. One of the four techniques specified in I.A.9.c.(1) through (4) is used;
 - b. The technique selected is operated according to the procedures specified in I.A.9.c.(1) through (4) as appropriate; and
 - c. If an enclosed system is used, monthly visual inspections are conducted and any leak detected is repaired within 15 days after detection. If the leak is not repaired by the 15th day after detection, the solvent shall be removed and the enclosed cleaner shall be shut down until the cleaner is repaired or its use is permanently discontinued.
 3. Flush cleaning. An affected flush cleaning operation shall be considered in compliance if the operating requirements specified in I.A.9.d. are implemented and carried out.
- D. Organic HAP and VOC content levels--primer and topcoat application operations. [40 CFR, §63.749(d)]

1. Performance test periods. For uncontrolled coatings that are not averaged, each 24 hours is considered a performance test. For compliant and non-compliant coatings that are averaged together, each 30-day period is considered a performance test, unless the permitting agency specifies a shorter averaging period as part of an ambient ozone control program. When using a control device other than a carbon adsorber, three 1-hour runs constitute the test period for the initial and any subsequent performance test. When using a carbon adsorber, each rolling material balance period is considered a performance test. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #1]
2. Initial performance tests. If a control device is used, the Permittee shall conduct an initial performance test to demonstrate compliance with the overall reduction efficiency specified in I.A.10, unless a waiver is obtained under either 40 CFR, §§63.7(e)(2)(iv) or 63.7(h). The initial performance test shall be conducted according to the procedures and test methods specified in VI.A and VI.A.7 for carbon adsorbers and in VI.A.8 for control devices other than carbon adsorbers. For carbon adsorbers, the initial performance test shall be used to establish the appropriate rolling material balance period for determining compliance. The procedures in II.D.2.a through f shall be used in determining initial compliance with the provisions of this Permit for carbon adsorbers. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #2 and #3]
 - a. General.
 - (1) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual carbon adsorber vessels pursuant to VI.A.7.b or d, the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all of the individual carbon adsorber vessels. The Permittee shall notify the permitting authority at the time the fixed-bed carbon adsorber is constructed as to which option (i.e., II.D.2.a(1) or (2)) shall be exercised during required testing.
 - (2) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel pursuant to VI.A.7.c or d, each carbon adsorber vessel shall be tested individually. The test for each carbon adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles. The Permittee shall notify the permitting authority at the time the fixed-bed carbon adsorber is constructed as to which option (i.e., II.D.2.a(1) or (2)) shall be exercised during required testing.
 - b. EPA Method 1 or 1A of appendix A of Part 60 is used for sample and velocity traverses.

- c. EPA Method 2, 2A, 2C, or 2D of appendix A of Part 60 is used for velocity and volumetric flow rates.
 - d. EPA Method 3 of appendix A of Part 60 is used for gas analysis.
 - e. EPA Method 4 of appendix A of Part 60 is used for stack gas moisture.
 - f. EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.
3. The primer application operation is considered in compliance when the conditions specified in II.D.3.a through d, as applicable, and in II.D.4 are met. Failure to meet any one of these conditions shall constitute noncompliance.
- a. For all uncontrolled primers, all values of H_i and H_a (as determined using the procedures specified in VI.A.3 and 4 are less than or equal to 350 grams of organic HAP per liter (2.9 lb/gal) of primer (less water) as applied, and all values of G_i and G_a (as determined using the procedures specified in VI.A.5 and 6 are less than or equal to 350 grams of organic VOC per liter (2.9 lb/gal) of primer (less water and exempt solvents) as applied.
 - b. If a control device is used: [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #2 and #3]
 - (1) The overall control system efficiency, E_k , as determined using the procedures specified in VI.A.7 for control systems containing carbon adsorbers and in VI.A.8 for control systems with other control devices, is equal to or greater than 81% during the initial performance test and any subsequent performance test;
 - (2) If an incinerator other than a catalytic incinerator is used, the average combustion temperature for all 3-hour periods is greater than or equal to the average combustion temperature established under III.A.2.k; and
 - (3) If a catalytic incinerator is used, the average combustion temperatures for all 3-hour periods are greater than or equal to the average combustion temperatures established under III.A.2.l.
 - c. General.
 - (1) Uses an application technique specified in I.A.10.f(1)(a) through (h), or
 - (2) Uses an alternative application technique, as allowed under I.A.10.f(1)(i), such that the emissions of both organic HAP and VOC for the implementation period of the alternative application method are less than or equal to the emissions generated using

HVLP or electrostatic spray application methods as determined using the procedures specified in VI.A.9.

- d. Operates all application techniques in accordance with the manufacturer's specifications or locally prepared operating procedures, whichever is more stringent.
4. The topcoat application operation is considered in compliance when the conditions specified in II.D.4.a through d, as applicable, and in II.F are met. Failure to meet any of these conditions shall constitute noncompliance.
- a. For all uncontrolled topcoats, all values of H_i and H_a (as determined using the procedures specified in VI.A.3 and 4) are less than or equal to 420 grams organic HAP per liter (3.5 lb/gal) of topcoat (less water) as applied, and all values of G_i and G_a (as determined using the procedures specified in VI.A.5 and 6) are less than or equal to 420 grams organic VOC per liter (3.5 lb/gal) of topcoat (less water and exempt solvents) as applied.
 - b. If a control device is used, [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #2 and #3]
 - (1) The overall control system efficiency, E_k , as determined using the procedures specified in VI.A.7 for control systems containing carbon adsorbers and in VI.A.8 for control systems with other control devices, is equal to or greater than 81% during the initial performance test and any subsequent performance test;
 - (2) If an incinerator other than a catalytic incinerator is used, the average combustion temperature for all 3-hour periods is greater than or equal to the average combustion temperature established under III.A.2.k; and
 - (3) If a catalytic incinerator is used, the average combustion temperatures for all 3-hour periods are greater than or equal to the average combustion temperatures established under III.A.2.l.
 - c. General.
 - (1) Uses an application technique specified in I.A.10.f.(1)(a) through (h); or
 - (2) Uses an alternative application technique, as allowed under I.A.10.f(1)(i), such that the emissions of both organic HAP and VOC for the implementation period of the alternative application method are less than or equal to the emissions generated using HVLP or electrostatic spray application methods as determined using the procedures specified in VI.A.9.

- d. Operates all application techniques in accordance with the manufacturer's specifications or locally prepared operating procedures.

- E. Inorganic HAP emissions--primer and topcoat application operations. For each primer or topcoat application operation that emits inorganic HAP, the operation is in compliance when: [40 CFR, §63.749(e)]
 - 1. It is operated according to the requirements specified in I.A.10.g.(1) through (3); and
 - 2. It is shut down immediately whenever the pressure drop or water flow rate is outside the limit(s) established for them and is not restarted until the pressure drop or water flow rate is returned within these limit(s), as required under I.A.10.g.(3).

- F. Organic HAP emissions--Depainting operations. [Applicable to Depainting Operations, AOS #2] [40 CFR, §63.749(f)]
 - 1. Performance test periods. When using a control device other than a carbon adsorber, three 1-hour runs constitute the test period for the initial and any subsequent performance test. When a carbon adsorber is used, each rolling material balance period is considered a performance test. Each 24-hour period is considered a performance test period for determining compliance with I.A.11.b.(1). For uncontrolled organic emissions from depainting operations, each calendar year is considered a performance test period for determining compliance with the HAP limits for organic HAP-containing chemical strippers used for spot stripping and decal removal.
 - 2. Initial performance tests. If a control device is used, the Permittee shall conduct an initial performance test to demonstrate compliance with the overall reduction efficiency specified in I.A.11.c, unless a waiver is obtained under either 40 CFR 63, §§63.7(e)(2)(iv) or 63.7(h). The initial performance test shall be conducted according to the procedures and test methods specified in VI.A and VI.A.7 for carbon adsorbers and in VI.A.8 for control devices other than carbon adsorbers. For carbon adsorbers, the initial performance test shall be used to establish the appropriate rolling material balance period for determining compliance. The procedures in II.F.2.a through f shall be used in determining initial compliance with the provisions of this Permit for carbon adsorbers.
 - a. General.
 - (1) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual carbon adsorber vessels pursuant to VI.A.7.b or d, the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all of the individual carbon adsorber vessels. The Permittee shall notify the permitting authority at the time the fixed-bed carbon adsorber is constructed as to which option (i.e., II.F.2.a(1) or (2)) shall be exercised during required testing.

- (2) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel pursuant to VI.A.7.c or d, each carbon adsorber vessel shall be tested individually. The test for each carbon adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles. The Permittee shall notify the permitting authority at the time the fixed-bed carbon adsorber is constructed as to which option (i.e., II.F.2.a(1) or (2)) shall be exercised during required testing.
 - b. EPA Method 1 or 1A of appendix A of Part 60 is used for sample and velocity traverses.
 - c. EPA Method 2, 2A, 2C, or 2D of appendix A of Part 60 is used for velocity and volumetric flow rates.
 - d. EPA Method 3 of appendix A of Part 60 is used for gas analysis.
 - e. EPA Method 4 of appendix A of Part 60 is used for stack gas moisture.
 - f. EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.
3. An organic HAP-containing chemical stripper depainting operation is considered in compliance when the conditions specified in II.F.3.a are met.
- a. If a carbon adsorber (or other control device) is used, the overall control efficiency of the control system, as determined using the procedures specified in VI.A.7 (or other control device as determined using the procedures specified in VI.A.8), is equal to or greater than 95% for control systems installed on or after September 1, 1995, during the initial performance test and all subsequent material balances (or performance tests, as appropriate).
 - b. For non-HAP depainting operations complying with I.A.11.b.(1);
 - (1) For any spot stripping and decal removal, the value of C, as determined using the procedures specified in VI.A.10, is less than or equal to 26 gallons of organic HAP-containing chemical stripper or 190 pounds of organic HAP per commercial aircraft depainted calculated on a yearly average; and is less than or equal to 50 gallons of organic HAP-containing chemical stripper or 365 pounds of organic HAP per military aircraft depainted calculated on a yearly average; and
 - (2) The requirements of I.A.11.b.(2) are carried out during malfunctions of non-chemical based equipment.

G. Inorganic HAP emissions--depainting operations. Each depainting operation is in compliance when: [40 CFR, §63.749(g)]

1. The operating requirements specified in I.A.11.b.(4) are followed; and
2. It is shut down immediately whenever the pressure drop or water flow rate is outside the limit(s) established for them and is not restarted until the pressure drop or water flow rate is returned within these limit(s), as required under I.A.11.b.(4)(e).

H. Chemical milling maskant application operations. [40 CFR, §63.749(h)]

1. Performance test periods. For uncontrolled chemical milling maskants that are not averaged, each 24-hour period is considered a performance test. For compliant and noncompliant chemical milling maskants that are averaged together, each 30-day period is considered a performance test, unless the permitting agency specifies a shorter period as part of an ambient ozone control program. When using a control device other than a carbon adsorber, three 1-hour runs constitute the test period for the initial and any subsequent performance test. When a carbon adsorber is used, each rolling material balance period is considered a performance test.
2. Initial performance tests. If a control device is used, the Permittee shall conduct an initial performance test to demonstrate compliance with the overall reduction efficiency specified in I.A.12.d, unless a waiver is obtained under either 40 CFR, §§63.7(e)(2)(iv) or 63.7(h). The initial performance test shall be conducted according to the procedures and test methods specified in VI.A and VI.A.7 for carbon adsorbers and in VI.A.8 for control devices other than carbon adsorbers. For carbon adsorbers, the initial performance test shall be used to establish the appropriate rolling material balance period for determining compliance. The procedures in II.H.2.a through f shall be used in determining initial compliance with the provisions of this Permit for carbon adsorbers. [Applicable to Chemical Milling Maskant Application Operations, AOS #1]

a. General.

- (1) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual carbon adsorber vessels pursuant to VI.A.7.b or d, the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all of the individual carbon adsorber vessels. The Permittee shall notify the permitting authority at the time the fixed-bed carbon adsorber is constructed as to which option (i.e., II.H.2.a(1) or (2)) shall be exercised during required testing.
- (2) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel pursuant to VI.A.7.c or d, each carbon adsorber

vessel shall be tested individually. The test for each carbon adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles. The Permittee shall notify the permitting authority at the time the fixed-bed carbon adsorber is constructed as to which option (i.e., II.H.2.a(1) or (2)) shall be exercised during required testing.

- b. EPA Method 1 or 1A of appendix A of Part 60 is used for sample and velocity traverses.
 - c. EPA Method 2, 2A, 2C, or 2D of appendix A of Part 60 is used for velocity and volumetric flow rates.
 - d. EPA Method 3 of appendix A of Part 60 is used for gas analysis.
 - e. EPA Method 4 of appendix A of Part 60 is used for stack gas moisture.
 - f. EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.
3. The chemical milling maskant application operation is considered in compliance when the conditions specified in II.H.3.a and b are met.
- a. For all uncontrolled chemical milling maskants, all values of H_i and H_a (as determined using the procedures specified in VI.A.11 and 12) are less than or equal to 622 grams of organic HAP per liter (5.2 lb/gal) of Type I chemical milling maskant as applied (less water), and 160 grams of organic HAP per liter (1.3 lb/gal) of Type II chemical milling maskant as applied (less water). All values of G_i and G_a (as determined using the procedures specified in VI.A.13 and 14) are less than or equal to 622 grams of VOC per liter (5.2 lb/gal) of Type I chemical milling maskant as applied (less water and exempt solvents), and 160 grams of VOC per liter (1.3 lb/gal) of Type II chemical milling maskant (less water and exempt solvents) as applied.
 - b. If a carbon adsorber (or other control device) is used, the overall control efficiency of the control system, as determined using the procedures specified in VI.A.7 (or systems with other control devices as determined using the procedures specified in VI.A.8), is equal to or greater than 81% during the initial performance test period and all subsequent material balances (or performance tests, as appropriate). [Applicable to Chemical Milling Maskant Application Operations, AOS #1]
- I. Handling and storage of waste. For those wastes subject to this Permit, failure to comply with the requirements specified in I.A.13 shall be considered a violation. [40 CFR, §63.749(i)]
- J. Compliance with nonopacity emission standards. [40 CFR, §63.6(f)]

1. Applicability. The nonopacity emission standards set forth in this Permit shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified.
2. Methods for determining compliance.
 - a. The Administrator and control officer will determine compliance with nonopacity emission standards in this part based on the results of performance tests conducted according to the procedures in VI.A, unless otherwise specified in this Permit.
 - b. The Administrator and control officer will determine compliance with nonopacity emission standards in this part by evaluation of the Permittee's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in I.A.14 and this Permit.
 - c. If the Permittee conducts performance testing at startup to obtain an operating permit, the results of such testing may be used to demonstrate compliance with a relevant standard if--
 - (1) The performance test was conducted within a reasonable amount of time before an initial performance test is required to be conducted under the relevant standard;
 - (2) The performance test was conducted under representative operating conditions for the source;
 - (3) The performance test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in XVII of Part A and VI.A of Part B of this Permit; and
 - (4) The performance test was appropriately quality-assured, as specified in XVII of Part A and VI of Part B of this Permit.
 - d. The Administrator and control officer will determine compliance with design, equipment, work practice, or operational emission standards in this part by review of records, inspection of the source, and other procedures specified in this Permit.
 - e. The Administrator and control officer will determine compliance with design, equipment, work practice, or operational emission standards in this part by evaluation of the Permittee's conformance with operation and maintenance requirements, as specified in I.A.14 and in this Permit.

K. Use of an alternative nonopacity emission standard. [40 CFR, §63.6(g)]

1. If, in the Administrator's judgment, the Permittee has established that an alternative means of emission limitation will achieve a reduction in emissions of a hazardous air pollutant from an affected source at least equivalent to the

reduction in emissions of that pollutant from that source achieved under any design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act, the Administrator will publish in the Federal Register a notice permitting the use of the alternative emission standard for purposes of compliance with the promulgated standard. Any Federal Register notice under this paragraph shall be published only after the public is notified and given the opportunity to comment. Such notice will restrict the permission to the stationary source(s) or category(ies) of sources from which the alternative emission standard will achieve equivalent emission reductions. The Administrator will condition permission in such notice on requirements to assure the proper operation and maintenance of equipment and practices required for compliance with the alternative emission standard and other requirements, including appropriate quality assurance and quality control requirements, that are deemed necessary.

2. The Permittee, requesting permission under this paragraph shall, unless otherwise specified in this Permit, submit a proposed test plan or the results of testing and monitoring in accordance with 40 CFR, §63.7 and §63.8, a description of the procedures followed in testing or monitoring, and a description of pertinent conditions during testing or monitoring. Any testing or monitoring conducted to request permission to use an alternative nonopacity emission standard shall be appropriately quality assured and quality controlled, as specified in 40 CFR, §63.7 and §63.8.

III. Monitoring Requirements.

A. Monitoring Requirements for Sources Identified in I.A.1 of this Part. [40 CFR, §63.751]

1. Enclosed spray gun cleaners. The Permittee, when using an enclosed spray gun cleaner under I.A.9.c.(1)(a), shall visually inspect the seals and all other potential sources of leaks associated with each enclosed gun spray cleaner system at least once per month. Each inspection shall occur while the system is in operation.
2. Incinerators and carbon adsorbers--initial compliance demonstrations. The Permittee must demonstrate initial compliance with the requirements of I.A.10.d, I.A.11.c, or I.A.12.d of this Permit. The Permittee, when using a carbon adsorber to comply with the requirements in this Permit, shall comply with the requirements specified in III.A.2.a through g. The Permittee, when using an incinerator to comply with the requirements in this Permit, shall comply with the requirements specified in III.A.2.h through l. Prior to the time an alternate operating scenario is to be employed, the Permittee shall identify and submit to the permitting authority the specific operating parameter(s) to be monitored as required by III.A.2.a, b, c, d, e, k, and l. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #2 and #3, Depainting Operations, AOS #2] [40 CFR, §63.751(b)]
 - a. Except as allowed by III.A.2.b and e, for each control device used to control organic HAP or VOC emissions, the Permittee shall fulfill the requirements of III.A.2.a.(1) or (2). [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #2]

- (1) The Permittee shall establish as a site-specific operating parameter the outlet total HAP or VOC concentration that demonstrates compliance with I.A.10.d, I.A.11.c, or I.A.12.d as appropriate; or
 - (2) The Permittee shall establish as the site-specific operating parameter the control device efficiency that demonstrates compliance with I.A.10.d , I.A.11.c, or I.A.12.d.
 - (3) When a nonregenerative carbon adsorber is used to comply with I.A.10.d, I.A.11.c, or I.A.12.d, the site-specific operating parameter value may be established as part of the design evaluation used to demonstrate initial compliance. Otherwise, the site-specific operating parameter value shall be established during the initial performance test conducted according to the procedures of VI.A.7.
- b. For each nonregenerative carbon adsorber, in lieu of meeting the requirements of III.A.2.a, the Permittee may establish as the site-specific operating parameter the carbon replacement time interval, as determined by the maximum design flow rate and organic concentration in the gas stream vented to the carbon adsorption system. The carbon replacement time interval shall be established either as part of the design evaluation to demonstrate initial compliance or during the initial performance test conducted according to the procedures in VI.A.7.a, b, c, or d.
- c. If the Permittee is venting solvent HAP emissions from a source through a room, enclosure, or hood, to a control device to comply with I.A.10.d, I.A.11.c, or I.A.12.d, then the Permittee shall: [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #2 and #3, Depainting Operations, AOS #2, and Chemical Milling Maskant Application Operations, AOS #1]]
- (1) Submit to the Administrator and control officer the compliance status report required by V.A.8.f a plan that:
 - (a) Identifies the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained;
 - (b) Discusses why this parameter is appropriate for demonstrating ongoing compliance; and
 - (c) Identifies the specific monitoring procedures;
 - (2) Set the operating parameter value, or range of values, that demonstrate compliance with I.A.10.d, I.A.11.c, or I.A.12.d, as appropriate; and

- (3) Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.
- d. The Permittee, if subject to III.A.2.a, b, or c (3), shall calculate the site-specific operating parameter value, or range of values, as the arithmetic average of the maximum and/or minimum operating parameter values, as appropriate, that demonstrate compliance with I.A.10.d, I.A.11.c, or I.A.12.d during the multiple test runs required by VI.A.7.a and b. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #2 and #3, Depainting Operations, AOS #2, and Chemical Milling Maskant Application Operations, AOS #1]
- e. For each solvent recovery device used to comply with I.A.10.d, I.A.11.c, or I.A.12.d, in lieu of meeting the requirements of III.A.2.a, the results of the material balance calculation conducted in accordance with VI.A.7.a may serve as the site-specific operating parameter that demonstrates compliance with I.A.10.d, I.A.11.c, or I.A.12.d. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #2 and #3, Depainting Operations, AOS #2, and Chemical Milling Maskant Application Operations, AOS #1]
- f. Continuous compliance monitoring. Following the date on which the initial compliance demonstration is completed, continuous compliance with I.A.10.d, I.A.11.c, or I.A.12.d of this Permit shall be demonstrated as outlined in this paragraph. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #2 and #3, Depainting Operations, AOS #2, and Chemical Milling Maskant Application Operations, AOS #1]
- (1) If the Permittee is subject to I.A.10.d, I.A.11.c, or I.A.12.d of this Permit, then the Permittee shall monitor the applicable parameters specified in III.A.2.f.(2), (3), or (4) depending on the type of control technique used.
- (2) Compliance monitoring shall be subject to the following provisions:
- (a) Except as allowed by III.A.2.f.(3)(a)(ii), all continuous emission monitors shall comply with performance specification (PS) 8 or 9 in 40 CFR Part 60, appendix B, as appropriate depending on whether VOC or HAP concentration is being measured. The requirements in appendix F of 40 CFR Part 60 shall also be followed. In conducting the quarterly audits required by appendix F, the Permittee shall challenge the monitors with compounds representative of the gaseous emission stream being controlled.
- (b) If the effluent from multiple emission points are combined prior to being channeled to a common control

device, the Permittee is required only to monitor the common control device, not each emission point.

- (3) If the Permittee is complying with I.A.10.d, I.A.11.c, or I.A.12.d through the use of a control device and establishing a site-specific operating parameter in accordance with III.A.2.a, then the Permittee shall fulfill the requirements of III.A.f.(3)(a) and III.A.f.(3)(b) or (c), as appropriate.
- (a) The Permittee shall install, calibrate, operate, and maintain a continuous emission monitor.
- (i) The continuous emission monitor shall be used to measure continuously the total HAP or VOC concentration at both the inlet and the outlet whenever HAP from coating and paint stripping operations are vented to the control device, or when continuous compliance is demonstrated through a percent efficiency calculation; or
- (ii) If the Permittee is using a nonregenerative carbon adsorber, in lieu of using continuous emission monitors as specified in III.A.2.f(3)(i), then the Permittee may use a portable monitoring device to monitor total HAP or VOC concentration at the inlet and outlet or the outlet of the carbon adsorber as appropriate.
- (a) The monitoring device shall be calibrated, operated, and maintained in accordance with the manufacturer's specifications.
- (b) The monitoring device shall meet the requirements of Part 60, appendix A, Method 21, sections 2, 3, 4.1, 4.2, and 4.4. The calibration gas shall either be representative of the compounds to be measured or shall be methane, and shall be at a concentration associated with 125% of the expected organic compound concentration level for the carbon adsorber outlet vent.
- (c) The probe inlet of the monitoring device shall be placed at approximately the center of the carbon adsorber outlet vent. The probe shall be held there for at least 5 minutes during which flow into the carbon adsorber is expected to occur.

The maximum reading during that period shall be used as the measurement.

- (b) If complying with I.A.10.d, I.A.11.c, or I.A.12.d through the use of a carbon adsorption system with a common exhaust stack for all of the carbon vessels, the Permittee shall not operate the control device at an average control efficiency less than that required by I.A.10.d, I.A.11.c, or I.A.12.d for three consecutive adsorption cycles.
 - (c) If complying with I.A.10.d, I.A.11.c, or I.A.12.d through the use of a carbon adsorption system with individual exhaust stacks for each of the multiple carbon adsorber vessels, the Permittee shall not operate any carbon adsorber vessel at an average control efficiency less than that required by I.A.10.d, I.A.11.c, or I.A.12.d as calculated daily using a 7 to 30-day rolling average.
 - (d) If complying with I.A.10.d, I.A.11.c, or I.A.12.d through the use of a nonregenerative carbon adsorber, in lieu of the requirements of III.A.f.(3)(b) or (c), the Permittee may monitor the VOC or HAP concentration of the adsorber exhaust daily, at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater, or at a frequency as determined by the Permittee and approved by the Administrator.
- (4) Permittees complying with I.A.10.d, I.A.11.c, or I.A.12.d through the use of a nonregenerative carbon adsorber and establishing a site-specific operating parameter for the carbon replacement time interval in accordance with III.A.2.b shall replace the carbon in the carbon adsorber system with fresh carbon at the predetermined time interval as determined in the design evaluation.
 - (5) If the Permittee is complying with I.A.10.d, I.A.11.c, or I.A.12.d by capturing emissions through a room, enclosure, or hood, then the Permittee shall install, calibrate, operate, and maintain the instrumentation necessary to measure continuously the site-specific operating parameter established in accordance with III.A.2.c whenever VOC and HAP from coating and stripper operations are vented through the capture device. The capture device shall not be operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with III.A.2.c for any 3-hour period.
- g. If the Permittee is complying with III.A.2.d or e, then the Permittee shall calculate the site-specific operating parameter value as the arithmetic average of the minimum operating parameter values that demonstrate compliance with I.A.10.d and I.A.12.d during the three test runs required by VI.A.8.b.(4). [Applicable to Primer and Topcoat Application]

Operations, Organic HAP and VOC Emissions, AOS #2 and #3, Depainting Operations, AOS #2, and Chemical Milling Maskant Application Operations, AOS #1]

- h. All temperature monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications. Every 3 months, facilities shall replace the temperature sensors or have the temperature sensors recalibrated. As an alternative, a facility may use a continuous emission monitoring system (CEMS) to verify that there has been no change in the destruction efficiency and effluent composition of the incinerator. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #3, Depainting Operations, AOS #2, and Chemical Milling Maskant Application Operations, AOS #1]
- i. Where an incinerator other than a catalytic incinerator is used, a thermocouple equipped with a continuous recorder shall be installed and continuously operated in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #3, Depainting Operations, AOS #2, and Chemical Milling Maskant Application Operations, AOS #1]
- j. Where a catalytic incinerator is used, thermocouples, each equipped with a continuous recorder, shall be installed and continuously operated in the gas stream immediately before and after the catalyst bed. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #3, Depainting Operations, AOS #2, and Chemical Milling Maskant Application Operations, AOS #1]
- k. For each incinerator other than a catalytic incinerator, the Permittee shall establish during each performance test during which compliance is demonstrated, including the initial performance test, the minimum combustion temperature as a site-specific operating parameter. This minimum combustion temperature shall be the operating parameter value that demonstrates compliance with I.A.10.d and I.A.12.d. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #3, Depainting Operations, AOS #2, and Chemical Milling Maskant Application Operations, AOS #1]
- l. For each catalytic incinerator, the Permittee shall establish during each performance test during which compliance is demonstrated, including the initial performance test, the minimum gas temperature upstream of the catalyst bed and the minimum gas temperature difference across the catalyst bed as site-specific operating parameters. These minimum temperatures shall be the operating parameter values that demonstrate compliance with I.A.10.d and I.A.12.d. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #3, Depainting Operations, AOS #2, and Chemical Milling Maskant Application Operations, AOS #1]

3. Dry particulate filter, HEPA filter, and waterwash systems--primer and topcoat application operations. [Applicable to Primer and Topcoat Operations, Inorganic HAP Emissions from Existing Sources, AOS #1 and #2, Primer and Topcoat Operations, Inorganic HAP Emissions from New Sources, AOS #1] [40 CFR, §63.751(c)]
 - a. If the Permittee is using a dry particulate filter system to meet the requirements of I.A.10.g.(2), then the Permittee shall, while primer or topcoat application operations are occurring, continuously monitor the pressure drop across the system and read and record the pressure drop once per shift following the recordkeeping requirements of IV.A.5.
 - b. If the Permittee is using a conventional waterwash system to meet the requirements of I.A.10.g.(2), then the Permittee shall, while primer or topcoat application operations are occurring, continuously monitor the water flow rate through the system and read and record the water flow rate once per shift following the recordkeeping requirements of IV.A.5. If the Permittee is using a pumpless waterwash system to meet the requirements of I.A.10.g.(2), then the Permittee shall, while primer and topcoat application operations are occurring, measure and record the parameter(s) recommended by the booth manufacturer that indicate booth performance once per shift, following the recordkeeping requirements of IV.A.5.

4. Particulate filters and waterwash booths--depainting operations. If the Permittee is using a dry particulate filter or a conventional waterwash system in accordance with the requirements of I.A.11.b.(4), then the Permittee shall, while depainting operations are occurring, continuously monitor the pressure drop across the particulate filters or the water flow rate through the conventional waterwash system and read and record the pressure drop or the water flow rate once per shift following the recordkeeping requirements of IV.A.6. If the Permittee is using a pumpless waterwash system to meet the requirements of IV.A.6, then the Permittee shall, while depainting operations are occurring, measure and record the parameter(s) recommended by the booth manufacturer that indicate booth performance once per shift, following the recordkeeping requirements of IV.A.6.[40 CFR, §63.7.

5. Use of an alternative monitoring method. [40 CFR, §63.751(e)]
 - a. General. Until permission to use an alternative monitoring method has been granted by the Administrator under this paragraph, the Permittee shall remain subject to the requirements of this section.
 - b. After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring methods or procedures of this section including, but not limited to, the following:
 - (1) Alternative monitoring requirements when the affected source is infrequently operated; or

- (2) Alternative locations for installing continuous monitoring systems when the Permittee can demonstrate that installation at alternate locations will enable accurate and representative measurements; or
 - (3) Alternatives to the American Society for Testing and Materials (ASTM) test methods or sampling procedures specified in this section.
- c. If the Administrator finds reasonable grounds to dispute the results obtained by an alternative monitoring method, requirement, or procedure, the Administrator may require the use of a method, requirement, or procedure specified in this section. If the results of the specified and the alternative method, requirement, or procedure do not agree, the results obtained by the specified method, requirement, or procedure shall prevail.
- d. General.
 - (1) Request to use alternative monitoring method. If the Permittee wishes to use an alternative monitoring method, then the Permittee shall submit an application to the Administrator as described in III.A.5.d.(2). The application may be submitted at any time provided that the monitoring method is not used to demonstrate compliance with a relevant standard or other requirement. If the alternative monitoring method is to be used to demonstrate compliance with a relevant standard, the application shall be submitted not later than with the site-specific test plan required in XVII of Part A (if requested) or with the site-specific performance evaluation plan (if requested), or at least 60 days before the performance evaluation is scheduled to begin.
 - (2) The application shall contain a description of the proposed alternative monitoring system and information justifying the Permittee's request for an alternative monitoring method, such as the technical or economic infeasibility, or the impracticality, of the affected source using the required method.
 - (3) The Permittee may submit the information required in III.A.5.d well in advance of the submittal dates specified in II.A.5.d to ensure a timely review by the Administrator in order to meet the compliance demonstration date specified in this Permit.
- e. Approval of request to use alternative monitoring method.
 - (1) The Administrator will notify the Permittee of his/her intention to deny approval of the request to use an alternative monitoring method within 60 calendar days after receipt of the original request and within 60 calendar days after receipt of any supplementary information that is submitted. If notification of intent to deny approval is not received within 60 calendar days,

the alternative monitoring method is to be considered approved. Before disapproving any request to use an alternative monitoring method, the Administrator will notify the applicant of the Administrator's intent to disapprove the request together with:

- (a) Notice of the information and findings on which the intended disapproval is based; and
- (b) Notice of opportunity for the Permittee to present additional information to the Administrator before final action on the request. At the time the Administrator notifies the applicant of his or her intention to disapprove the request, the Administrator will specify how much time the Permittee will have after being notified of the intended disapproval to submit the additional information.

- (2) If the Administrator approves the use of an alternative monitoring method for an affected source under paragraph III.A.5.e, the Permittee shall continue to use the alternative monitoring method until approval is received from the Administrator to use another monitoring method as allowed by III.A.5.e.

6. Reduction of monitoring data. [40 CFR, §63.751(f)]

- a. The data may be recorded in reduced or nonreduced form (e.g., parts per million (ppm) pollutant and % O₂ or nanograms per Joule (ng/J) of pollutant).
- b. All emission data shall be converted into units specified in this Permit for reporting purposes. After conversion, the data may be rounded to the same number of significant digits as used in this Permit to specify the emission limit (e.g., rounded to the nearest 1% overall reduction efficiency).

B. Stationary Rotating Machinery.

- 1. The Permittee shall monitor daily the sulfur content and lower heating value of the fuel being fired in the machine. [PCC 17.16.340.I]
- 2. For the 84 kW emergency generator, the 401 kW fire pump engines, the 380 kW fire pump engines, and the 235 kW emergency generator, Permittee shall also monitor the type of fuel being fired in those units to ensure only JetA, natural gas, diesel fuel, or vegetable oil/diesel mix is being fired. [PCC 17.12.180.A.3]
- 3. The Permittee shall conduct a Method 9 test for opacity at least quarterly on the 84 kW (112 hp) and the 235 kW (315 hp) emergency generators during their operation. [PCC 17.12.180.A.3]

4. The Permittee shall monitor the monthly hours of operation of each of the engines identified in I.B.5 of this Part. [PCC 17.12.180.A.3]
 5. A demonstration to show compliance with the emission limit(s) for particulate matter pursuant to I.B.1.a of this Part shall not be required unless the control officer has reason to believe that conditions may exist which have the potential to cause a violation of the applicable requirement. This is because use of the referenced equation yields higher calculated allowable emissions than those obtained using standard emission factors representative for this class of equipment.
- C. Fossil-Fuel Fired Steam Generators and General Fuel Burning Equipment.
1. The Permittee shall monitor the fuel being combusted in each fossil fuel fired piece of equipment rated at 1,000,000 Btu per hour or greater. [PCC 17.12.180.A.3]
 2. The Permittee shall conduct a Method 9 test for opacity at least quarterly on all fossil-fuel fired steam generators and general fuel burning equipment firing liquid fuel and rated at 1,000,000 Btu per hour or greater. [PCC 17.12.180.A.3]
- D. Fuel Storage Tanks. For each petroleum liquid storage tank, the Permittee shall maintain a file of each type of petroleum liquid stored, of the typical Reid vapor pressure of each type of petroleum liquid stored, and of dates of storage. Dates on which the storage vessel is empty shall be shown. [PCC 17.16.230.E.1]
- E. Surface Coating Operations. [PCC 17.12.180.A.3]
1. The Permittee shall monitor the amount of volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) in each coating and solvent product used in all surface coating operations at the facility to include those surface coating operations contracted to vendors and used onsite.
 2. The Permittee shall monitor the amount of each coating and solvent product used at the facility during each calendar month. Onsite operations contracted to vendors, other than spot painting (e.g., touchup work), shall be included in the monthly totals.
- F. Abrasive Blasting Operations. The Permittee shall monitor the type of control or control device used to minimize emissions from abrasive blasting operations. [PCC 17.12.180.A.3]
- G. Demolition/Renovation: The Permittee shall keep a record of all relevant paperwork on file. The relevant paperwork shall include but not be limited to the "NESHAP Notification for Renovation and Demolition Activities" form, and all supporting documents. [PCC 17.12.180.A.3 and PCC 17.16.530.A.8]
- H. Nonvehicle Air Conditioner Maintenance and/or Services: The Permittee shall keep a record of all paperwork relevant to the applicable requirements of 40 CFR 82, Subpart F on file.
- IV. Recordkeeping Requirements.

- A. Recordkeeping Requirements for Sources Identified in I.A.1 of this Part. [40 CFR, §63.752]
1. The Permittee shall not fail to keep records, notify, report, or revise reports as required. [40 CFR, §63.4(a)(2)]
 2. General. The Permittee shall fulfill all recordkeeping requirements specified in 40 CFR, §§63.10 (a), (b), (d), and (f). [40 CFR, §63.752(a)]
 3. Cleaning operation. Each Permittee of a new or existing cleaning operation subject to this permit shall record the information specified in IV.A.3.a through e, as appropriate. [40 CFR, §63.752(b)]
 - a. The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility.
 - b. For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in I.A.9.b.(1) or for semi-aqueous cleaning solvents used for flush cleaning operations:
 - (1) The name of each cleaning solvent used;
 - (2) All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements; and
 - (3) Annual records of the volume of each solvent used, as determined from facility purchase records or usage records.
 - c. For each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in I.A.9.b.(1), but does comply with the vapor pressure requirement in I.A.9.b.(2):
 - (1) The name of each cleaning solvent used;
 - (2) The composite vapor pressure of each cleaning solvent used;
 - (3) All vapor pressure test results, if appropriate, data, and calculations used to determine the composite vapor pressure of each cleaning solvent; and
 - (4) The amount (in gallons) of each cleaning solvent used each month at each operation.
 - d. For each cleaning solvent used for the exempt hand-wipe cleaning operations specified in I.A.9.(e) that does not conform to the vapor pressure or composition requirements of I.A.9.(b):
 - (1) The identity and amount (in gallons) of each cleaning solvent used each month at each operation; and

- (2) A list of the processes set forth in I.A.9.e to which the cleaning operation applies.
 - e. A record of all leaks from enclosed spray gun cleaners identified pursuant to III.A.1 that includes for each leak found:
 - (1) Source identification;
 - (2) Date leak was discovered; and
 - (3) Date leak was repaired.
- 4. Primer and topcoat application operations--organic HAP and VOC. The Permittee shall record the information specified in IV.A.4.a through f, as appropriate. [40 CFR, §63.752(c)]
 - a. The name and VOC content as received and as applied of each primer and topcoat used at the facility.
 - b. For uncontrolled primers and topcoats that meet the organic HAP and VOC content limits in I.A.10.c.(1) through (4) without averaging:
 - (1) The mass of organic HAP emitted per unit volume of coating as applied (less water) (H_i) and the mass of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (G_i) for each coating formulation within each coating category used each month (as calculated using the procedures specified in VI.A.3 and 5);
 - (2) All data, calculations, and test results (including EPA Method 24 results) used in determining the values of H_i and G_i ; and
 - (3) The volume (gal) of each coating formulation within each coating category used each month.
 - c. For "low HAP content" uncontrolled primers with organic HAP content less than or equal to 250 g/l (2.1 lb/gal) less water as applied and VOC content less than or equal to 250 g/l (2.1 lb/gal) less water and exempt solvents as applied:
 - (1) Annual purchase records of the total volume of each primer purchased; and
 - (2) All data, calculations, and test results (including EPA Method 24 results) used in determining the organic HAP and VOC content as applied. These records shall consist of the manufacturer's certification when the primer is applied as received, or the data and calculations used to determine H_i if not applied as received.

- d. For primers and topcoats complying with the organic HAP or VOC content level by averaging: [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #1]
 - (1) The monthly volume-weighted average masses of organic HAP emitted per unit volume of coating as applied (less water) (H_a) and of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (G_a) for all coatings (as determined by the procedures specified in VI.A.4 and 6); and
 - (2) All data, calculations, and test results (including EPA Method 24 results) used to determine the values of H_a and G_a .

- e. For primers and topcoats that are controlled by a control device other than a carbon adsorber: [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #3]
 - (1) The overall control efficiency of the control system (as determined using the procedures specified in VI.A.8) and all test results, data, and calculations used in determining the overall control efficiency;
 - (2) If an incinerator other than a catalytic incinerator is used, continuous records of the firebox temperature recorded under iii.a.2.i and all calculated 3-hour averages of the firebox temperature; and
 - (3) If a catalytic incinerator is used, continuous records of the temperature recorded under III.A.2.j and all calculated 3-hour averages of the recorded temperatures.

- f. For primer and topcoats that are controlled by a carbon adsorber: [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #2]
 - (1) The overall control efficiency of the control system (as determined using the procedures specified in VI.A.7) and all test results, data, and calculations used in determining the overall control efficiency. The length of the rolling material balance period and all data and calculations used for determining this rolling period. The record of the certification of the accuracy of the device that measures the amount of HAP or VOC recovered; or
 - (2) For nonregenerative carbon adsorbers, the overall control efficiency of the control system (as determined using the procedures specified in VI.A.7) and all test results, data, and calculations used in determining the overall control efficiency. The record of the carbon replacement time established as the site-specific operating parameter to demonstrate compliance.

5. Primer and topcoat application operations--inorganic HAP emissions. [40 CFR, §63.752(d)]
- a. Each Permittee complying with I.A.10.g for the control of inorganic HAP emissions from primer and topcoat application operations through the use of a dry particulate filter system or a HEPA filter system shall record the pressure drop across the operating system once each shift during which coating operations occur.
 - b. Each Permittee complying with I.A.10.g through the use of a conventional waterwash system shall record the water flow rate through the operating system once each shift during which coating operations occur. Each Permittee complying with I.A.10.g through the use of a pumpless waterwash system shall record the parameter(s) recommended by the booth manufacturer that indicate the performance of the booth once each shift during which coating operations occur. [Applicable to Primer and Topcoat Operations, Inorganic HAP Emissions from Existing Sources, AOS #1]
 - c. This log shall include the acceptable limit(s) of pressure drop, water flow rate, or for the pumpless waterwash booth, the booth manufacturer recommended parameter(s) that indicate the booth performance, as applicable, as specified by the filter or booth manufacturer or in locally prepared operating procedures. [Applicable to Primer and Topcoat Operations, Inorganic HAP Emissions from Existing Sources, AOS #1, Primer and Topcoat Operations, Inorganic HAP Emissions from New Sources, AOS #1]
6. Depainting operations. Each Permittee subject to the depainting standards specified in I.A.11 shall record the information specified in IV.A.6.a through g, as appropriate. [40 CFR, §63.752(e)]
- a. General. For all chemical strippers used in the depainting operation:
 - (1) The name of each chemical stripper; and
 - (2) Monthly volumes of each organic HAP containing chemical stripper used or monthly weight of organic HAP-material used for spot stripping and decal removal.
 - b. For HAP-containing chemical strippers that are controlled by a carbon adsorber: [Applicable to Depainting Operations, AOS #2]
 - (1) The overall control efficiency of the control system (as determined using the procedures specified in VI.A.7) and all test results, data, and calculations used in determining the overall control efficiency. The length of the rolling material balance period and all data and calculations used for determining this rolling period. The record of the certification of the accuracy of the device that measures the amount of HAP or VOC recovered; or

- (2) For nonregenerative carbon adsorbers, the overall control efficiency of the control system (as determined using the procedures specified in VI.A.7) and all test results, data, and calculations used in determining the overall control efficiency. The record of the carbon replacement time established as the site-specific operating parameter to demonstrate compliance.
- c. For HAP-containing chemical strippers that are controlled by a control device other than a carbon adsorber: The overall control efficiency of the control system (as determined using the procedures specified in VI.A.8) and all test results, data, and calculations used in determining the overall control efficiency; [Applicable to Depainting Operations, AOS #2]
- d. For each type of aircraft depainted at the facility, a listing of the parts, subassemblies, and assemblies normally removed from the aircraft before depainting. Prototype, test model or aircraft that exist in low numbers (i.e., less than 25 aircraft of any one type) are exempt from this requirement.
- e. Non-chemical based equipment. If dry media blasting equipment is used to comply with the organic HAP emission limit specified in I.A.11.b.(1):
 - (1) The names and types of non-chemical based equipment; and
 - (2) For periods of malfunction,
 - (a) The non-chemical method or technique that malfunctioned;
 - (b) The date that the malfunction occurred;
 - (c) A description of the malfunction;
 - (d) The methods used to depaint aerospace vehicles during the malfunction period;
 - (e) The dates that these methods were begun and discontinued; and
 - (f) The date that the malfunction was corrected.
- f. Spot stripping and decal removal. For spot stripping and decal removal, the volume of organic HAP-containing chemical stripper or weight of organic HAP used, the annual average volume of organic HAP-containing chemical stripper or weight of organic HAP used per aircraft, the annual number of aircraft stripped, and all data and calculations used.
- g. Inorganic HAP emissions. Each Permittee shall record the actual pressure drop across the particulate filters or the visual continuity of the water curtain and water flow rate for conventional waterwash systems

once each shift in which the depainting process is in operation. For pumpless waterwash systems, the Permittee shall record the parameter(s) recommended by the booth manufacturer that indicate the performance of the booth once per shift in which the depainting process is in operation. This log shall include the acceptable limit(s) of the pressure drop as specified by the filter manufacturer, the visual continuity of the water curtain and the water flow rate for conventional waterwash systems, or the recommended parameter(s) that indicate the booth performance for pumpless systems as specified by the booth manufacturer or in locally prepared operating procedures.

7. Chemical milling maskant application operations. Each Permittee seeking to comply with the organic HAP and VOC content limits for the chemical milling maskant application operation, as specified in I.A.12.c, or the control system requirements specified in I.A.12.d, shall record the information specified in IV.A.7.a through d, as appropriate. [40 CFR, §63.752(f)]
 - a. For uncontrolled chemical milling maskants that meet the organic HAP or VOC content limit without averaging:
 - (1) The mass of organic HAP emitted per unit volume of chemical milling maskant as applied (less water) (H_i) and the mass of VOC emitted per unit volume of chemical milling maskant as applied (less water and exempt solvents) (G_i) for each chemical milling maskant formulation used each month (as determined by the procedures specified in VI.A.11 and 13);
 - (2) All data, calculations, and test results (including EPA Method 24 results) used in determining the values of H_i and G_i ; and
 - (3) The volume (gal) of each chemical milling maskant formulation used each month.
 - b. For chemical milling maskants complying with the organic HAP or VOC content level by averaging:
 - (1) The monthly volume-weighted average masses of organic HAP emitted per unit volume of chemical milling maskant as applied (less water) (H_a) and of VOC emitted per unit volume of chemical milling maskant as applied (less water and exempt solvents) (G_a) for all chemical milling maskants (as determined by the procedures specified in VI.A.12 and 14); and
 - (2) All data, calculations, and test results (including EPA Method 24 results) used to determine the values of H_a and G_a .
 - c. For chemical milling maskants that are controlled by a carbon adsorber: [Applicable to Chemical Milling Maskant Application Operations, AOS #1]

- (1) The overall control efficiency of the control system (as determined using the procedures specified in VI.A.7) and all test results, data, and calculations used in determining the overall control efficiency. The length of the rolling material balance period and all data and calculations used for determining this rolling period. The record of the certification of the accuracy of the device that measures the amount of HAP or VOC recovered; or
 - (2) For nonregenerative carbon adsorbers, the overall control efficiency of the control system (as determined using the procedures specified in VI.A.7) and all test results, data, and calculations used in determining the overall control efficiency. The record of the carbon replacement time established as the site-specific operating parameter to demonstrate compliance.
- d. For chemical milling maskants that are controlled by a control device other than a carbon adsorber: [Applicable to Chemical Milling Maskant Application Operations, AOS #1]
- (1) The overall control efficiency of the control system (as determined using the procedures specified in VI.A.8) and all test results, data, and calculations used in determining the overall control efficiency;
 - (2) If an incinerator other than a catalytic incinerator is used, continuous records of the firebox temperature recorded under III.A.2.i and all calculated 3-hour averages of the firebox temperature; and
 - (3) If a catalytic incinerator is used, continuous records of the temperature recorded under III.A.2.j and all calculated 3-hour averages of the recorded temperatures.
8. General recordkeeping requirements. [40 CFR, §63.10(b)]
- a. The Permittee shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.
 - b. The Permittee shall maintain relevant records for such source of:
 - (1) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);

- (2) The occurrence and duration of each malfunction of the air pollution control equipment;
- (3) All maintenance performed on the air pollution control equipment;
- (4) Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see I.A.14.c);
- (5) All information necessary to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see I.A.14.c) when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist", or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);
- (6) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);
- (7) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);
 - (a) This paragraph applies to a Permittee required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under IV.A.8.b.(7), the Permittee shall

retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(b) This paragraph applies to a Permittee required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph IV.A.8.b.(7), the Permittee shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(c) The Administrator or delegated authority, upon notification to the source, may require the Permittee to maintain all measurements as required by IV.A.8.b.(7), if the administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

(8) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;

(9) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;

(10) All CMS calibration checks;

(11) All adjustments and maintenance performed on CMS;

(12) All documentation supporting initial notifications and notifications of compliance status under V.A.

c. Recordkeeping requirement for applicability determinations. If a Permittee determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants is not subject to a relevant standard or other requirement established under this part, the Permittee shall keep a record of the applicability determination

on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination shall include an analysis (or other information) that demonstrates why the Permittee believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) shall be sufficiently detailed to allow the Administrator to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis shall be performed in accordance with requirements established in this Permit for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112, if any.

9. Recordkeeping Requirements for Alternate Operating Scenarios. The Permittee shall maintain on-site all records associated with the employment of an alternate operating scenario and shall maintain a written log available for the permitting agency's review. The Permittee shall record on the log, at minimum, the following information: [PCC 17.12.180.A.4 and 13]
 - a. A description of the alternate operating scenario being employed at the location or operation. The description shall have the form of the alternate operating scenario as described in the Summary section of this permit (e.g., Cleaning Operations, Spray Gun Cleaning, Alternate Operating Scenario #2) and shall clearly identify to which location or operation the alternate operating scenario applies.
 - b. The date the change to an alternate operating scenario was made. This entry on the log shall be made contemporaneously with the Permittee's physical change to the alternate operating scenario.
 - c. The date the change to the normal operating scenario was made. This entry on the log shall be made contemporaneously with the Permittee's physical change to the normal operating scenario.
 - d. The name, title, and signature of the individual making the log entry.

B. Stationary Rotating Machinery. [PCC 17.12.180.A.4]

1. The Permittee shall maintain a record of the sulfur content and lower heating value of the fuel being fired in each machine as follows:
 - a. For units firing natural gas, the Permittee shall maintain on site a copy of the Federal Energy Regulatory Commission approved tariff agreement stipulating the sulfur content and heating value of the pipeline quality natural gas.

- b. For all other fuels, the Permittee shall maintain on site a copy of the fuel vendor supplied data sheet that specifies the sulfur content and heating value of the fuel being supplied.
 - 2. For the 84 kW (112 horsepower) emergency generator, the 401 kW fire pump engines, the 380 kW fire pump engines, and the 235 kW emergency generator, the Permittee shall maintain an operating log of each engine's operating hours containing, at minimum, the following information:
 - a. The date the engine was fired.
 - b. The duration of engine operation on that date.
 - c. The type of fuel fired in the unit.
 - d. The date and results of any opacity tests conducted during the period.
 - e. The printed name and signature of the operator making the log entry.
 - 3. The Permittee shall use the information from each engine's log to prepare a 12-month rolling total of the operating hours of the 84 kW emergency generator and the 235 kW emergency generator.
 - a. Within 30 calendar days of the beginning of a new month, the Permittee shall sum the operating hours entered on the log for the previous month and record and clearly identify that entry on the log.
 - b. The Permittee shall sum the total operating hours for the previous 12-month period and record and clearly identify that entry on the log.
 - 4. The Permittee shall report to the control officer any daily period during which the sulfur content of the fuel being fired in the machine exceeds 0.8 percent. [PCC 17.16.340.J]
- C. Fossil-Fuel Fired Steam Generators and General Fuel Burning Equipment.
 - 1. The Permittee shall maintain records of the type of fuel combusted in each unit that does not combust pipeline quality natural gas exclusively. These records shall include the sulfur content of the fuel based upon fuel vendor supplied data sheets that specify the sulfur content and heating value of the fuel being supplied.
 - 2. The Permittee shall maintain records of the results of each opacity test conducted pursuant to III.C.2 of this Part. [PCC 17.12.180.A.5]
- D. Fuel Storage Tanks. The Permittee shall maintain a log for each petroleum liquid storage vessel and shall record in the log the following information for each delivery of petroleum liquid: [PCC 17.16.230.E.1]
 - 1. The storage tank identifier.
 - 2. The date of delivery.

3. The type and amount of petroleum liquid being delivered.
4. The typical Reid vapor pressure of the petroleum liquid being delivered.
5. Dates on which the storage vessel is empty.

E. Surface Coating Operations. [17.12.180.A.4]

1. The Permittee shall maintain a file of Material Safety Data Sheets (MSDS) or equivalent manufacturer's product data sheet for each coating and solvent product used at the facility to include coatings and solvents used by contracted vendors (for work other than spot painting).
2. Upon request of the control officer, the Permittee shall prepare a list of architectural coatings used at the facility. The list shall be made available to the control officer within 30 calendar days of the request and shall be accompanied by the Material Safety Data Sheets (MSDS) or equivalent manufacturer's product information and content sheet for each of the architectural coatings listed.
3. The Permittee shall maintain a record of the amounts of each coating and solvent product used during each calendar month (excluding spot painting conducted by vendors). Within 30 calendar days of the beginning of a new month, the Permittee shall sum the amounts of each coating and solvent product used during the previous month and record and clearly identify that entry in a log.
4. The files shall be retained for a minimum of five years and shall be made available to the control officer upon request.

F. Abrasive Blasting Operations. The Permittee shall record the type of control or control device used to minimize emissions from each abrasive blasting operation. Such records shall be retained on site for a minimum of five years and shall be made available to the control officer upon request.

V. Reporting Requirements.

A. Reporting Requirements for Sources Identified in I.A.1 of this Part. [40 CFR, §63.753]

1. Permittees with existing primer or topcoat application operations and repainting operations who construct or reconstruct a spray booth or hangar that does not have the potential to emit 10 tons/yr or more of an individual inorganic HAP or 25 tons/yr or more of all inorganic HAP combined shall only be required to notify the Administrator of such construction or reconstruction on an annual basis. Notification shall be submitted on or before January 31st of each year and shall include the information required in V.A.8.d for each such spray booth or hangar constructed or reconstructed during the prior calendar year, except that such information shall be limited to inorganic HAP's. No advance notification or written approval from the Administrator pursuant to V.A.8.d shall be required for the construction or reconstruction of such a spray booth or hangar unless the booth or hangar has the potential to emit 10 tons/yr or more of an individual

inorganic HAP or 25 tons/yr or more of all inorganic HAP combined.[40 CFR, §63.743(a)(10)]

2. General. [40 CFR, §63.753(a)]
 - a. Except as provided in V.A.2.b and c, The Permittee shall fulfill the requirements contained in V.A.8 through 12. The initial notification for existing sources required in V.A.8 shall be submitted not later than September 1, 1997. The notification of compliance status shall include:
 - (1) Information detailing whether the source has operated within the specified ranges of its designated operating parameters.
 - (2) For each coating line, where averaging will be used along with the types of quantities of coatings the facility expects to use in the first year of operation. Each averaging scheme shall have been approved in advance by the control officer and adopted as part of the facility's Title V permit. An averaging scheme shall be approved by the control officer before the averaging scheme is employed by the Permittee.
 - b. The initial notification for existing sources, required in V.A.8 shall be submitted no later than September 1, 1997. For the purposes of this Permit, a Title V or part 70 permit application may be used in lieu of the initial notification, provided the same information is contained in the permit application, and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notifications.
3. Cleaning operation. For each cleaning operation, the Permittee shall submit the following information: Semiannual reports occurring every 6 months from the date of the notification of compliance status that identify: [40 CFR, §63.753(b)]
 - a. Any instance where a noncompliant cleaning solvent is used for a non-exempt hand-wipe cleaning operation;
 - b. A list of any new cleaning solvents used for hand-wipe cleaning in the previous 6 months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in I.A.9.b.(1);
 - c. Any instance where a noncompliant spray gun cleaning method is used;
 - d. Any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 15 days; and
 - e. If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of

compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.

4. Primer and topcoat application operations. Each Permittee of a primer or topcoat application operation subject to this Permit shall submit the following information: [40 CFR, §63.753(c)]
 - a. Semiannual reports occurring every 6 months from the date of the notification of compliance status that identify:
 - (1) For primers and topcoats where compliance is not being achieved through the use of averaging or a control device, each value of H_i and G_i , as recorded under IV.A.4.b.(1), that exceeds the applicable organic HAP or VOC content limit specified in I.A.10.c;
 - (2) For primers and topcoats where compliance is being achieved through the use of averaging, each value of H_a and G_a , as recorded under IV.A.4.d.(1), that exceeds the applicable organic HAP or VOC content limit specified in I.A.10.c;
 - (3) If incinerators are used to comply with the standards, all periods when the 3-hour average combustion temperature(s) is (are) less than the average combustion temperature(s) established under III.A.2.k. or l during the most recent performance test during which compliance was demonstrated;
 - (4) If a carbon adsorber is used;
 - (a) each rolling period when the overall control efficiency of the control system is calculated to be less than 81%, the initial material balance calculation, and any exceedances as demonstrated through the calculation; or,
 - (b) for nonregenerative carbon adsorbers, submit the design evaluation, the continuous monitoring system performance report, and any excess emissions as demonstrated through deviations of monitored values.
 - (5) For control devices other than an incinerator or carbon adsorber, each exceedance of the operating parameter(s) established for the control device under the initial performance test during which compliance was demonstrated;
 - (6) All times when a primer or topcoat application operation was not immediately shut down when the pressure drop across a dry particulate filter or HEPA filter system, the water flow rate through a conventional waterwash system, or the recommended parameter(s) that indicate the booth performance for pumpless systems, as appropriate, was outside the limit(s) specified by the

filter or booth manufacturer or in locally prepared operating procedures;

- (7) If the operations have been in compliance for the semiannual period, a statement that the operations have been in compliance with the applicable standards; and,

- b. Annual reports beginning 12 months after the date of the notification of compliance status listing the number of times the pressure drop or water flow rate for each dry filter or waterwash system, as applicable, was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures.

5. Depainting operation. Each Permittee of a depainting operation subject to this Permit shall submit the following information: [40 CFR, §63.753(d)]

- a. Semiannual reports occurring every 6 months from the date of the notification of compliance status that identify:
 - (1) Any 24-hour period where organic HAP were emitted from the depainting of aerospace vehicles, other than from the exempt operations listed in I.A.11.a, I.A.11.b.(3) and I.A.11.b.(4)(f).
 - (2) Any new chemical strippers used at the facility during the reporting period;
 - (3) The organic HAP content of these new chemical strippers;
 - (4) For each chemical stripper that undergoes reformulation, its organic HAP content;
 - (5) Any new non-chemical depainting technique in use at the facility since the notification of compliance status or any subsequent semiannual report was filed;
 - (6) For periods of malfunctions:
 - (a) The non-chemical method or technique that malfunctioned;
 - (b) The date that the malfunction occurred;
 - (c) A description of the malfunction;
 - (d) The methods used to depaint aerospace vehicles during the malfunction period;
 - (e) The dates that these methods were begun and discontinued; and
 - (f) The date that the malfunction was corrected;

- (7) All periods where a nonchemical depainting operation subject to I.A.11.b.(2) and (4) for the control of inorganic HAP emissions was not immediately shut down when the pressure drop, water flow rate, or recommended booth parameter(s) was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operational procedures;
 - (8) A list of new and discontinued aircraft models depainted at the facility over the last 6 months and a list of the parts normally removed for depainting for each new aircraft model being depainted; and
 - (9) If the depainting operation has been in compliance for the semiannual period, a statement signed by a responsible company official that the operation was in compliance with the applicable standards.
- b. Annual reports occurring every 12 months from the date of the notification of compliance status that identify:
- (1) The average volume per aircraft of organic HAP-containing chemical strippers or weight of organic HAP used for spot stripping and decal removal operations if it exceeds the limits specified in I.A.11.b.(3); and
 - (2) The number of times the pressure drop limit(s) for each filter system or the number of times the water flow rate limit(s) for each waterwash system were outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures.
- c. Where a control device is used to control organic HAP emissions, semiannual reports that identify:
- (1) If a carbon adsorber is used, [Applicable to Depainting Operations, AOS #2]
 - (a) each rolling period when the overall control efficiency of the control system is calculated to be less than 95% for new systems, the initial material balance calculation, and any exceedances as demonstrated through the calculation; or,
 - (b) for nonregenerative carbon adsorbers, submit the design evaluation, the continuous monitoring system performance report, and any excess emissions as demonstrated through deviations of monitored values.
 - (2) For control devices other than a carbon adsorber, each exceedance of the operating parameter(s) established for the

control device under the initial performance test during which compliance was demonstrated; [Applicable to Depainting Operations, AOS #2]

- (3) Descriptions of any control devices currently in use that were not listed in the notification of compliance status or any subsequent report.

6. Chemical milling maskant application operation. Each Permittee of a chemical milling maskant application operation subject to this Permit shall submit semiannual reports occurring every 6 months from the date of the notification of compliance status that identify: [40 CFR, §63.753(e)]

- a. For chemical milling maskants where compliance is not being achieved through the use of averaging or a control device, each value of H_i and G_i , as recorded under IV.A.7.a.(1), that exceeds the applicable organic HAP or VOC content limit specified in I.A.12.c;

- b. For chemical milling maskants where compliance is being achieved through the use of averaging, each value of H_a and G_a , as recorded under IV.A.7.b.(1), that exceeds the applicable organic HAP or VOC content limit specified in I.A.12.c; [Applicable to Chemical Milling Maskant Application Operations, AOS #1]

- c. Where a control device is used, [Applicable to Chemical Milling Maskant Application Operations, AOS #1]

- (1) If incinerators are used to comply with the standards, all periods when the 3-hour average combustion temperature(s) is (are) less than the average combustion temperature(s) established under III.A.2.k or l during the most recent performance test during which compliance was demonstrated;

- (2) If a carbon adsorber is used,

- (a) Each rolling period when the overall control efficiency of the control system is calculated to be less than 81%, the initial material balance calculation, and any exceedances as demonstrated through the calculation; or,

- (b) For nonregenerative carbon adsorbers, submit the design evaluation, the continuous monitoring system performance report, and any excess emissions as demonstrated through deviations of monitored values.

- (3) For control devices other than an incinerator or carbon adsorber, each exceedance of the operating parameter(s) established for the control device under the initial performance test during which compliance was demonstrated;

- d. All chemical milling maskants currently in use that were not listed in the notification of compliance status or any other subsequent semiannual report;
 - e. Descriptions of any control devices currently in use that were not listed in the notification of compliance status or any subsequent report; and
 - f. If the operations have been in compliance for the semiannual period, a statement that the chemical milling maskant application operation has been in compliance with the applicable standards.
7. After a State has been delegated the authority to implement and enforce notification requirements established under 40 CFR Subpart 63, the Permittee shall submit notifications to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the Permittee shall send a copy of each notification submitted to the State to the appropriate Regional Office of the EPA. [40 CFR, §63.9(a)(4)(ii)]
8. Initial Notifications. [40 CFR, §63.9(b)]
- a. The Permittee that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard), shall provide the following information:
 - (1) The name and address of the Permittee;
 - (2) The address (i.e., physical location) of the affected source;
 - (3) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;
 - (4) A brief description of the nature, size, design, and method of operation of the source, including its operating design capacity and an identification of each point of emission for each hazardous air pollutant, or if a definitive identification is not yet possible, a preliminary identification of each point of emission for each hazardous air pollutant; and
 - (5) A statement of whether the affected source is a major source or an area source.
 - b. The Permittee of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date of a relevant standard under this part and for which an application for approval of construction or

reconstruction is not required under V.A.8.d, shall notify the Administrator in writing that the source is subject to the relevant standard no later than 120 days after initial startup. The notification shall provide all the information required in V.A.8.a.(1) through (v), delivered or postmarked with the notification required in V.A.8.d.

- c. The Permittee of a new or reconstructed major affected source that has an initial startup after the effective date of a relevant standard under this part and for which an application for approval of construction or reconstruction is required under V.A.8.d shall provide the following information in writing to the Administrator:
- (1) A notification of intention to construct a new major affected source, reconstruct a major affected source, or reconstruct a major source such that the source becomes a major affected source with the application for approval of construction or reconstruction;
 - (2) A notification of the date when construction or reconstruction was commenced, submitted simultaneously with the application for approval of construction or reconstruction, if construction or reconstruction was commenced before the effective date of the relevant standard;
 - (3) A notification of the date when construction or reconstruction was commenced, delivered or postmarked not later than 30 days after such date, if construction or reconstruction was commenced after the effective date of the relevant standard;
 - (4) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.
- d. After the effective date of any relevant standard established by the Administrator under this part, whether or not an approved permit program is effective in the State in which an affected source is (or would be) located, a Permittee who intends to construct a new affected source or reconstruct an affected source subject to such standard, or reconstruct a source such that it becomes an affected source subject to such standard, shall notify the Administrator, in writing, of the intended construction or reconstruction. The notification shall be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date of the relevant standard) if the construction or reconstruction commences after the effective date of a relevant standard promulgated in this part. The notification shall be submitted as soon as practicable before startup but no later than 60 days after the effective date of a relevant standard promulgated in this part if the construction or reconstruction had commenced and initial startup had not occurred before the standard's effective date. The notification shall include all the information required for an application for approval of construction or reconstruction as specified in V.A.8.a. For major

sources, the application for approval of construction or reconstruction may be used to fulfill the requirements of this paragraph.

- e. Notification of performance test. The Permittee shall notify the Administrator and control officer in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator or control officer to review and approve the site-specific test plan required under XVII.B of Part A, if requested by the Administrator, and to have an observer present during the test. [40 CFR, §63.9(e)]

- f. Notification of compliance status. [40 CFR, §63.9(h)]
 - (1) The requirements of V.A.8.f.(a) through (d) apply when an affected source becomes subject to a relevant standard.

 - (2) General.
 - (a) Before a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under 40 CFR Part 63, the owner or operator shall submit to the Administrator a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list--
 - (i) The methods that were used to determine compliance;
 - (ii) The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
 - (iii) The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
 - (iv) The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard;
 - (v) An analysis demonstrating whether the affected source is a major source or an area source (using

the emissions data generated for this notification);

- (vi) A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and
 - (vii) A statement by the Permittee as to whether the source has complied with the relevant standard or other requirements.
- (b) The notification shall be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard (unless a different reporting period is specified in a relevant standard, in which case the letter shall be sent before the close of business on the day the report of the relevant testing or monitoring results is required to be delivered or postmarked). For example, the notification shall be sent before close of business on the 60th (or other required) day following completion of the initial performance test and again before the close of business on the 60th (or other required) day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under this part, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations.
- (c) After a title V permit has been issued to the Permittee, the Permittee shall comply with all requirements for compliance status reports contained in the source's Title V permit, including reports required under this Part. After a title V permit has been issued to the Permittee, and each time a notification of compliance status is required under this Part, the Permittee shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard.
- (d) If the Permittee submits estimates or preliminary information in the application for approval of construction or reconstruction required in V.A.8.d in place of the actual emissions data or control efficiencies,

the Permittee shall submit the actual emissions data and other correct information as soon as available but no later than with the initial notification of compliance status required in this section.

- g. Change in information already provided. Any change in the information already provided under this section shall be provided to the Administrator and control officer in writing within 15 calendar days after the change. [40 CFR, §63.9(j)]
 - h. After a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this Part, the Permittee shall submit reports to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the Permittee shall send a copy of each report submitted to the State to the appropriate Regional Office of the EPA. The Regional Office may waive this requirement for any reports at its discretion. [40 CFR, §63.10(a)(4)(ii)]
 - i. If a Permittee in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such source under this part, the Permittee may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the Permittee and the State. For each relevant standard established pursuant to section 112 of the Act, the allowance in the previous sentence applies in each State beginning 1 year after the affected source's compliance date for that standard. [40 CFR, §63.10(a)(5)]
9. Periodic startup, shutdown, and malfunction reports. If actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan [see I.A.14.c], the Permittee shall state such information in a startup, shutdown, and malfunction report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the Permittee or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). If the Permittee is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and

continuous monitoring system performance (or other periodic) reports, and the Permittee receives approval to reduce the frequency of reporting for the latter, the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. [40 CFR, §63.10(d)(5)(i)]

10. Immediate startup, shutdown, and malfunction reports. Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports, any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator and control officer within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the Permittee or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred. Notwithstanding the requirements of the previous sentence, after the effective date of an approved permit program in the State in which an affected source is located, the Permittee may make alternative reporting arrangements, in advance, with the permitting authority in that State. [40 CFR, §63.10(d)(5)(ii)]
 11. All information required to be submitted to the EPA under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act, provided that each specific delegation may exempt sources from a Federal or State reporting requirement. The Administrator may permit all or some of the information to be submitted to the appropriate State agency only, instead of to the EPA and the State agency. [40 CFR, §63.12(c)]
 12. If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, the Permittee may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication. [40 CFR, §63.13(c)]
- B. Stationary Rotating Machinery. The Permittee shall report to the control officer any daily period during which the sulfur content of the fuel being fired in the machine exceeds 0.8%. [PCC 17.16.340.J]
- C. All Equipment and Operations.
1. Excess Emissions and Permit Deviations. The Permittee shall report to the control officer any emissions in excess of the limits (as defined in PCC 17.04.340.A.78) established by this Part within 24 hours of the time the Permittee

first learned of the excess emissions occurrence. The Permittee shall report other deviations from permit requirements in this Part within two working days of the time the Permittee first learned of the occurrence of the deviation. (See Part "A", Section XI for detailed information on these two reports).

2. Semiannual Summary Reports of Required Monitoring. [PCC 17.12.180.A.5.a.]

a. In addition to the reports required pursuant to V.A, the Permittee shall submit semiannual summary reports of the following monitoring and/or recordkeeping requirements:

- (1) The most recent 12-month rolling total of engine operating hours for the 84 kW (112 hp) engine identified in I.B.5 of this Part.
- (2) Any instance of the sulfur content of fuel fired in stationary rotating machinery exceeding 0.8% by weight.
- (3) Any instance when the quarterly opacity checks required by II.C.2 result in opacities greater than 40%.
- (4) Results of any performance tests conducted during the reporting period.

b. Summary reports shall be due by January 31st (covering the period July 1st through December 31st) and July 31st (covering the period January 1st through June 30th) of each year. The first summary report due after permit issuance may not cover a 6-month period. All instances of excess emissions and deviations from permit requirements as defined in Part "A", Section XI shall be clearly identified in such reports.

3. Compliance Certification Reporting. [PCC 17.12.210.A.2.]

The Permittee shall submit a semiannual compliance certification to the control officer and to EPA Region IX. The Compliance Certification Report is due by January 31st and July 31st of each year and shall cover the 6-month periods of July 1st through December 31st and January 1st through June 30th respectively. The first report due after permit issuance may not cover a 6-month period. (See Part "A", Section VII for detailed information on this report).

4. Emissions Inventory Reporting. Every source subject to a permit requirement shall complete and submit an annual emissions inventory questionnaire when requested by the control officer. (See Part "A", Section VI for additional information on this report). [PCC 17.12.320.]

VI. Testing Requirements.

A. Testing Requirements for Sources Identified in I.A.1 of this Part. [40 CFR, §63.750]

1. Composition determination. Compliance with the hand-wipe cleaning solvent approved composition list specified in I.A.9.b.(1) for hand-wipe cleaning solvents shall be demonstrated using data supplied by the manufacturer of the

cleaning solvent. The data shall identify all components of the cleaning solvent and shall demonstrate that one of the approved composition definitions is met. [40 CFR, §63.750(a)]

2. Vapor pressure determination. The composite vapor pressure of hand-wipe cleaning solvents used in a cleaning operation subject to this Permit shall be determined as follows: [Applicable to Cleaning Operations, Hand-Wipe Cleaning, AOS #1] [40 CFR, §63.750(b)]

- a. For single-component hand-wipe cleaning solvents, the vapor pressure shall be determined using MSDS or other manufacturer's data, standard engineering reference texts, or other equivalent methods.
- b. The composite vapor pressure of a blended hand-wipe solvent shall be determined by quantifying the amount of each organic compound in the blend using manufacturer's supplied data or a gas chromatographic analysis in accordance with ASTM E 260-91 and by calculating the composite vapor pressure of the solvent by summing the partial pressures of each component. The vapor pressure of each component shall be determined using manufacturer's data, standard engineering reference texts, or other equivalent methods. The following equation shall be used to determine the composite vapor pressure:

$$PP_c = \sum_{i=1}^n \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \sum_{c=1}^n \frac{W_e}{MW_e} + \sum_{i=1}^n \frac{W_i}{MW_i}}$$

where:

W_i =Weight of the i 'th VOC compound, grams.

W_w =Weight of water, grams.

W_e =Weight of non-HAP, nonVOC compound, grams.

MW_i =Molecular weight of the i 'th VOC compound, g/g-mole.

MW_w =Molecular weight of water, g/g-mole.

MW_e =Molecular weight of exempt compound, g/g-mole.

PP_c =VOC composite partial pressure at 20°C, mm Hg.

VP_i =Vapor pressure of the i 'th VOC compound at 20°C, mm Hg.

3. Organic HAP content level determination--compliant primers and topcoats. For those uncontrolled primers and topcoats complying with the primer and topcoat organic HAP content limits specified in I.A.10.c without being averaged, the following procedures shall be used to determine the mass of organic HAP emitted per volume of coating (less water) as applied. [40 CFR, §63.750(c)]

- a. For coatings that contain no exempt solvents, determine the total organic HAP content using manufacturer's supplied data or Method 24 of 40 CFR Part 60, appendix A, to determine the VOC content. The VOC content shall be used as a surrogate for total HAP content for coatings that contain no exempt solvent. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 24

analysis, compliance shall be based on the results from the Method 24 analysis.

When Method 24 is used to determine the VOC content of water-reducible coatings, the precision adjustment factors in Reference Method 24 shall be used. If the adjusted analytical VOC content is less than the formulation solvent content, then the analytical VOC content should be set equal to the formulation solvent content.

- b. For each coating formulation as applied, determine the organic HAP weight fraction, water weight fraction (if applicable), and density from manufacturer's data. If these values cannot be determined using the manufacturer's data, the Permittee shall submit an alternative procedure for determining their values for approval by the Administrator. Recalculation is required only when a change occurs in the coating formulation.
- c. For each coating as applied, calculate the mass of organic HAP emitted per volume of coating (lb/gal) less water as applied using equations 1, 2, and 3:

$$V_{wi} = \frac{(D_{ci})(W_{wi})}{D_w} \quad \text{Eq. 1}$$

where

V_{wi} = volume (gal) of water in one gal of coating i.
 D_{ci} = density (lb of coating per gal of coating) of coating i.
 W_{wi} = weight fraction (expressed as a decimal) of water in coating i.
 D_w = density of water, 8.33 lb/gal.

$$M_{Hi} = (D_{ci})(W_{Hi}) \quad \text{Eq. 2}$$

where

M_{Hi} = mass (lb) of organic HAP in one gal of coating i.
 D_{ci} = density (lb of coating per gal of coating) of coating i.
 W_{Hi} = weight fraction (expressed as a decimal) of organic HAP in coating i.

$$H_i = \frac{M_{Hi}}{(1 - V_{wi})} \quad \text{Eq. 3}$$

where

H_i = mass of organic HAP emitted per volume of coating i (lb/gal) less water as applied.
 M_{Hi} = mass (lb) of organic HAP in one gal of coating i.
 V_{wi} = volume (gal) of water in one gal of coating i.

4. Organic HAP content level determination--averaged primers and topcoats. For those uncontrolled primers and topcoats that are averaged together in order to comply with the primer and topcoat organic HAP content limits specified in I.A.10.c, the following procedure shall be used to determine the monthly volume-weighted average mass of organic HAP emitted per volume of coating (less water) as applied, unless the permitting agency specifies a shorter averaging period as part of an ambient ozone control program. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #1]

- a. General.

- (1) Determine the total organic HAP weight fraction as applied of each coating. If any ingredients, including diluent solvent, are added to a coating prior to its application, the organic HAP weight fraction of the coating shall be determined at a time and location in the process after all ingredients have been added.
- (2) Determine the total organic HAP weight fraction of each coating as applied each month.
 - (a) If no changes have been made to a coating, either as supplied or as applied, or if a change has been made that has a minimal effect on the organic HAP content of the coating, the value previously determined may continue to be used until a change in formulation has been made by either the manufacturer or the user.
 - (b) If a change in formulation or a change in the ingredients added to the coating takes place, including the ratio of coating to diluent solvent, prior to its application, either of which results in a more than minimal effect on the organic HAP content of the coating, the total organic HAP weight fraction of the coating shall be redetermined.
- (3) Manufacturer's formulation data may be used to determine the total organic HAP content of each coating and any ingredients added to the coating prior to its application. If the total organic HAP content cannot be determined using the manufacturer's data, the Permittee shall submit an alternative procedure for determining the total organic HAP weight fraction for approval by the Administrator.

- b. Volumes.

- (1) Determine the volume both in total gallons as applied and in total gallons (less water) as applied of each coating. If any ingredients, including diluent solvents, are added prior to its application, the volume of each coating shall be determined at a time and location in the process after all ingredients (including any diluent solvent) have been added.

- (2) Determine the volume of each coating (less water) as applied each month, unless the permitting agency specifies a shorter period as part of an ambient ozone control program.
- (3) The volume applied may be determined from company records.

c. Densities.

- (1) Determine the density of each coating as applied. If any ingredients, including diluent solvent, are added to a coating prior to its application, the density of the coating shall be determined at a time and location in the process after all ingredients have been added.
- (2) Determine the density of each coating as applied each month, unless the permitting agency specifies a shorter period as part of an ambient ozone control program.
 - (a) If no changes have been made to a coating, either as supplied or as applied, or if a change has been made that has a minimal effect on the density of the coating, then the value previously determined may continue to be used until a change in formulation has been made by either the manufacturer or the user.
 - (b) If a change in formulation or a change in the ingredients added to the coating takes place, including the ratio of coating to diluent solvent, prior to its application, either of which results in a more than minimal effect on the density of the coating, then the density of the coating shall be redetermined.
- (3) The density may be determined from company records, including manufacturer's data sheets. If the density of the coating cannot be determined using the company's records, including the manufacturer's data, then the Permittee shall submit an alternative procedure for determining the density for approval by the Administrator.

d. Calculate the total volume in gallons as applied (less water) by summing the individual volumes of each coating (less water) as applied, which were determined under VI.A.4.b.

e. Calculate the volume-weighted average mass of organic HAP in coatings emitted per unit volume (lb/gal) of coating (less water) as applied during each 30-day period using equation 4:

$$H_a = \frac{\sum_{i=1}^n W_{Hi} D_{ci} V_{ci}}{C_{lw}} \quad \text{Eq. 4}$$

where

H_a = volume-weighted average mass of organic HAP emitted per unit volume of coating (lb/gal) (less water) as applied during each 30-day period for those coatings being averaged.

n = number of coatings being averaged.

W_{Hi} = weight fraction (expressed as a decimal) of organic HAP in coating i as applied that is being averaged during each 30-day period.

D_{ci} = density (lb of coating per gal of coating) of coating i as applied that is being averaged during each 30-day period.

V_{ci} = volume (gal) of coating i as applied that is being averaged during the 30-day period.

C_{lw} = total volume (gal) of all coatings (less water) as applied that are being averaged during each 30-day period.

5. VOC content level determination--compliant primers and topcoats. For those uncontrolled primers and topcoats complying with the primer and topcoat VOC content levels specified in I.A.10.c without being averaged, the following procedure shall be used to determine the mass of VOC emitted per volume of coating (less water and exempt solvents) as applied. [40 CFR, §63.750(e)]

- a. Determine the VOC content of each formulation (less water and exempt solvents) as applied using manufacturer's supplied data or Method 24 of 40 CFR Part 60, appendix A, to determine the VOC content. The VOC content shall be used as a surrogate for total HAP content for coatings that contain no exempt solvent. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 24 analysis, compliance shall be based on the results from the Method 24 analysis.

When Method 24 is used to determine the VOC content of water-reducible coatings, the precision adjustment factors in Reference Method 24 shall be used. If the adjusted analytical VOC content is less than the formulation solvent content, then the analytical VOC content should be set equal to the formulation solvent content.

- b. For each coating applied, calculate the mass of VOC emitted per volume of coating (lb/gal) (less water and exempt solvents) as applied using equations 5, 6, and 7:

$$V_{wi} = \frac{D_{ci} W_{wi}}{D_w} \quad \text{Eq. 5}$$

where

V_{wi} = volume (gal) of water in one gal of coating i .

D_{ci} = density (lb of coating per gal of coating) of coating i.
 W_{wi} = weight fraction (expressed as a decimal) of water in coating i.
 D_w = density of water, 8.33 lb/gal.

$$M_{Vi} = D_{ci}W_{Vi} \quad \text{Eq. 6}$$

where

M_{Vi} = mass (lb) of VOC in one gal of coating i.
 D_{ci} = density (lb of coating per gal of coating) of coating i.
 W_{Vi} = weight fraction (expressed as a decimal) of VOC in coating i.

$$G_i = \frac{M_{Vi}}{(1 - V_{wi}) - V_{Xi}} \quad \text{Eq. 7}$$

where

G_i = mass of VOC emitted per volume of coating i (lb/gal) (less water and exempt solvents) as applied.
 M_{Vi} = mass (lb) of VOC in one gal of coating i.
 V_{wi} = volume (gal) of water in one gal of coating i.
 V_{Xi} = volume (gal) of exempt solvents in one gal of coating i.

c. General.

- (1) If the VOC content is found to be different when EPA Method 24 is used during an enforcement inspection from that used by the Permittee in calculating G_a , compliance shall be based, except as provided in VI.A.5.c.(2), upon the VOC content obtained using EPA Method 24.
- (2) If the VOC content of a coating obtained using Method 24 would indicate noncompliance as determined under either II.D.3.a or II.D.4.a, The Permittee may elect to average the coating with other uncontrolled coatings and (re)calculate G_i (using the procedure specified in VI.A.6), provided appropriate and sufficient records were maintained for all coatings included in the average (re)calculation. The (re)calculated value of G_i (G_a in VI.A.6) for the averaged coatings shall then be used to determine compliance.

6. VOC content level determination--averaged primers and topcoats. For those uncontrolled primers and topcoats that are averaged within their respective coating category in order to comply with the primer and topcoat VOC content limits specified in I.A.10.c.(2) and (4), the following procedure shall be used to determine the monthly volume-weighted average mass of VOC emitted per volume of coating (less water and exempt solvents) as applied, unless the permitting agency specifies a shorter averaging period as part of an ambient ozone control program. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #1] [40 CFR, §63.750(f)]

- a. VOC Content.
 - (1) Determine the VOC content (lb/gal) as applied of each coating. If any ingredients, including diluent solvent, are added to a coating prior to its application, the VOC content of the coating shall be determined at a time and location in the process after all ingredients have been added.
 - (2) Determine the VOC content of each coating as applied each month, unless the permitting agency specifies a shorter period as part of an ambient ozone control program.
 - (a) If no changes have been made to a coating, either as supplied or as applied, or if a change has been made that has a minimal effect on the VOC content of the coating, the value previously determined may continue to be used until a change in formulation has been made by either the manufacturer or the user.
 - (b) If a change in formulation or a change in the ingredients added to the coating takes place, including the ratio of coating to diluent solvent, prior to its application, either of which results in a more than minimal effect on the VOC content of the coating, the VOC content of the coating shall be redetermined.
 - (3) Determine the VOC content of each primer and topcoat formulation (less water and exempt solvents) as applied using EPA Method 24 or from manufacturer's data.
- b. Volume.
 - (1) Determine the volume both in total gallons as applied and in total gallons (less water and exempt solvents) as applied of each coating. If any ingredients, including diluent solvents, are added prior to its application, the volume of each coating shall be determined at a time and location in the process after all ingredients (including any diluent solvent) have been added.
 - (2) Determine the volume of each coating (less water and exempt solvents) as applied each day.
 - (3) The volume applied may be determined from company records.
- c. Calculate the total volume in gallons (less water and exempt solvents) as applied by summing the individual volumes of each coating (less water and exempt solvents) as applied, which were determined under VI.A.6.b.

- d. Calculate the volume-weighted average mass of VOC emitted per unit volume (lb/gal) of coating (less water and exempt solvents) as applied for each coating category during each 30-day period using equation 8:

$$G_a = \frac{\sum_{i=1}^n (\text{VOC})_{ci} V_{ci}}{C_{lwes}} \quad \text{Eq. 8}$$

where

G_a = volume weighted average mass of VOC per unit volume of coating (lb/gal) (less water and exempt solvents) as applied during each 30-day period for those coatings being averaged.

n = number of coatings being averaged.

$(\text{VOC})_{ci}$ = VOC content (lb/gal) of coating i (less water and exempt solvents) as applied (as determined using the procedures specified in paragraph (f)(1) of this section) that is being averaged during the 30-day period.

V_{ci} = volume (gal) of coating i (less water and exempt solvents) as applied that is being averaged during the 30-day period.

C_{lwes} = total volume (gal) of all coatings (less water and exempt solvents) as applied during each 30-day period for those coatings being averaged.

- e. General.

- (1) If the VOC content is found to be different when EPA Method 24 is used during an enforcement inspection from that used by the Permittee in calculating G_a , recalculation of G_a is required using the new value. If more than one coating is involved, the recalculation shall be made once using all of the new values.
- (2) If recalculation is required, a Permittee may elect to include in the recalculation of G_a uncontrolled coatings that were not previously included provided appropriate and sufficient records were maintained for these other coatings to allow daily recalculations.
- (3) The recalculated value of G_a under either VI.A.6.e.(1) or (2) shall be used to determine compliance.

7. Overall VOC and/or organic HAP control efficiency--carbon adsorber. Each Permittee subject to the requirements of I.A.10.d, I.A.11.c, or I.A.12.d shall demonstrate initial compliance with the requirements of this Permit by following the procedures of VI.A.7.a, b, c, d, or e as applicable and VI.A.7.f, g, and h. When an initial compliance demonstration is required by this Permit, the procedures in VI.A.7.i. through n shall be used in determining initial compliance with the provisions of this Permit. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #2, Depainting Operations, AOS #2, and Chemical Milling Maskant Application Operations, AOS #1] [40 CFR, §63.750(g)]

- a. To demonstrate initial and continuous compliance with I.A.10.d, I.A.11.c, or I.A.12.d when emissions are controlled by a dedicated solvent recovery device, the Permittee may perform a liquid-liquid HAP or VOC material balance over rolling 7- to 30-day periods in lieu of demonstrating compliance through the methods in VI.A.7. b, c, or d. Results of the material balance calculations performed to demonstrate initial compliance shall be submitted to the Administrator with the notification of compliance status required by V.A.4.a.(4)(a). The amount of liquid HAP or VOC applied and recovered shall be determined as discussed in VI.A.7.a.(3). The overall HAP or VOC emission reduction (R) is calculated using equation 9:

$$R = \frac{M_r}{\sum_{i=1}^n [W_{oi}M_{ci} - RS_i]} \times 100 \quad \text{Eq. 9}$$

- (1) The value of RS_i is zero unless the Permittee submits the following information to the Administrator for approval of a measured RS_i value that is greater than zero:
 - (a) Measurement techniques; and
 - (b) Documentation that the measured value of RS_i exceeds zero.
- (2) The measurement techniques of VI.A.7.a.(1)(a) shall be submitted to the Administrator for approval with the notification of performance test.
- (3) Each Permittee demonstrating compliance by the test method described in VI.A.7.a shall:
 - (a) Measure the amount of coating or stripper as applied;
 - (b) Determine the VOC or HAP content of all coating and stripper applied using the test method specified in VI.A.3.a through c or VI.A.5.a and b;
 - (c) Install, calibrate, maintain, and operate, according to the manufacturer's specifications, a device that indicates the amount of HAP or VOC recovered by the solvent recovery device over rolling 7- to 30-day periods; the device shall be certified by the manufacturer to be accurate to within ± 2.0 percent, and this certification shall be kept on record;
 - (d) Measure the amount of HAP or VOC recovered; and

- (e) Calculate the overall HAP or VOC emission reduction (R) for rolling 7- to 30-day periods using equation 9.
 - (f) Compliance is demonstrated if the value of R is equal to or greater than the overall HAP control efficiencies required by I.A.10.d, I.A.11.c, or I.A.12.d.
- b. To demonstrate initial compliance with I.A.10.d, I.A.11.c, or I.A.12.d when affected HAP emission points are controlled by an emission control device other than a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel, the Permittee shall perform a gaseous emission test using the following procedures.
- (1) Construct the overall HAP emission reduction system so that all volumetric flow rates and total HAP or VOC emissions can be accurately determined by the applicable test methods and procedures specified in VI.A.7.i through n.
 - (2) Determine capture efficiency from the HAP emission points by capturing, venting, and measuring all HAP emissions from the HAP emission points. During a performance test, the Permittee with affected HAP emission points located in an area with other gaseous emission sources not affected by the standards in I.A. shall isolate the affected HAP emission points from all other gaseous emission points by one of the following methods:
 - (a) Build a temporary total enclosure around the affected HAP emission point(s); or
 - (b) Shut down all gaseous emission points not affected by this Permit and continue to exhaust fugitive emissions from the affected HAP emission points through any building ventilation system and other room exhausts such as drying ovens. All ventilation air must be vented through stacks suitable for testing.
 - (3) Operate the emission control device with all affected HAP emission points connected and operating.
 - (4) Determine the efficiency (E) of the control device using equation 10:
 - (5) Determine the efficiency (F) of the capture system using equation 11:

$$E = \frac{\sum_{i=1}^n Q_{bi}C_{bi} - \sum_{j=1}^p Q_{aj}C_{aj}}{\sum_{i=1}^n Q_{bi}C_{bi}} \quad \text{Eq. 10}$$

$$F = \frac{\sum_{i=1}^n Q_{di} C_{di}}{\sum_{i=1}^n Q_{di} C_{di} + \sum_{k=1}^p Q_{fk} C_{fk}} \quad \text{Eq. 11}$$

- (6) For each HAP emission point subject to I.A.10.d, I.A.11.c, or I.A.12.d, compliance is demonstrated if the product of (E) x (F) is equal to or greater than the overall HAP control efficiencies required under I.A.10.d, I.A.11.c, or I.A.12.d.

c. To demonstrate compliance with I.A.10.d, I.A.11.c, or I.A.12.d when affected HAP emission points are controlled by a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel, the Permittee shall perform a gaseous emission test using the following procedures:

- (1) Construct the overall HAP emission reduction system so that each volumetric flow rate and the total HAP emissions can be accurately determined by the applicable test methods and procedures specified in VI.A.7.i through n;
- (2) Assure that all HAP emissions from the affected HAP emission point(s) are segregated from gaseous emission points not subject to the standards in I.A. and that the emissions can be captured for measurement, as described in VI.A.7.b.(2)(a) and (b);
- (3) Operate the emission control device with all affected HAP emission points connected and operating;
- (4) Determine the efficiency (H_v) of each individual carbon adsorber vessel (v) using equation 12:

$$H_v = \frac{Q_{gv} C_{gv} - Q_{hv} C_{hv}}{Q_{gv} C_{gv}} \quad \text{Eq. 12}$$

- (5) Determine the efficiency of the carbon adsorption system (H_{sys}) by computing the average efficiency of the individual carbon adsorber vessels as weighted by the volumetric flow rate (Q_{hv}) of each individual carbon adsorber vessel (v) using equation 13:

$$H = \frac{\sum_{v=1}^q H_v Q_{hv}}{\sum_{v=1}^q Q_{hv}} \quad \text{Eq. 13}$$

- (6) Determine the efficiency (F) of the capture system using equation 11.

- (7) For each HAP emission point subject to I.A.10.d, I.A.11.c, or I.A.12.d, compliance is demonstrated if the product of (H_{sys}) x (F) is equal to or greater than the overall HAP control efficiency required by I.A.10.d, I.A.11.c, or I.A.12.d.

d. An alternative method of demonstrating compliance with I.A.10.d, I.A.11.c, or I.A.12.d is the installation of a total enclosure around the affected HAP emission point(s) and the ventilation of all HAP emissions from the total enclosure to a control device with the efficiency specified in VI.A.7.d.(3). If this method is selected, the compliance test methods described in VI.A.7.a, b, and c are not required. Instead, the Permittee shall:

- (1) Demonstrate that a total enclosure is installed. An enclosure that meets the requirements in VI.A.7.d.(1)(a) through (d) shall be considered a total enclosure. The Permittee operating an enclosure that does not meet these requirements may apply to the Administrator for approval of the enclosure as a total enclosure on a case-by-case basis. The enclosure shall be considered a total enclosure if it is demonstrated to the satisfaction of the Administrator that all HAP emissions from the affected HAP emission point(s) are contained and vented to the control device. The requirements for automatic approval are as follows:

- (a) The total area of all natural draft openings shall not exceed 5% of the total surface area of the total enclosure's walls, floor, and ceiling;
- (b) All sources of emissions within the enclosure shall be a minimum of four equivalent diameters away from each natural draft opening;
- (c) The average inward face velocity (FV) across all natural draft openings shall be a minimum of 3,600 meters per hour as determined by the following procedures:
 - (i) All forced makeup air ducts and all exhaust ducts are constructed so that the volumetric flow rate in each can be accurately determined by the test methods and procedures specified in VI.A.7.j. and k; volumetric flow rates shall be calculated without the adjustment normally made for moisture content; and
 - (ii) Determine FV by equation 14:

$$FV = \frac{\sum_{j=1}^n Q_{out\ j} - \sum_{i=1}^p Q_{in\ i}}{\sum_{k=1}^q A_k} \quad \text{Eq. 14}$$

- (d) The air passing through all natural draft openings shall flow into the enclosure continuously. If FV is less than or equal to 9,000 meters per hour, the continuous inward flow of air shall be verified by continuous observation using smoke tubes, streamers, tracer gases, or other means approved by the Administrator over the period that the volumetric flow rate tests required to determine FV are carried out. If FV is greater than 9,000 meters per hour, the direction of airflow through the natural draft openings shall be presumed to be inward at all times without verification.
- (2) Determine the control device efficiency using equation 10 or equations 12 and 13, as applicable, and the test methods and procedures specified in VI.A.7.i through n.
- (3) Compliance shall be achieved if the installation of a total enclosure is demonstrated and the value of E determined from equation 10 (or the value of H_{sys} determined from equations 12 and 13, as applicable) is equal to or greater than the overall HAP control efficiencies required under I.A.10.d, I.A.11.c, or I.A.12.d.
- e. When nonregenerative carbon adsorbers are used to comply with I.A.10.d, I.A.11.c, or I.A.12.d, the Permittee may conduct a design evaluation to demonstrate initial compliance in lieu of following the compliance test procedures of VI.A.7.a, b, c, and d. The design evaluation shall consider the vent stream composition, component concentrations, flow rate, relative humidity, and temperature, and shall establish the design exhaust vent stream organic compound concentration level, capacity of the carbon bed, type and working capacity of activated carbon used for the carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and the emission point operating schedule.
- f. General.
- (1) To demonstrate initial compliance with I.A.10.d, I.A.11.c, or I.A.12.d when hard piping or ductwork is used to direct VOC and HAP emissions from a VOC and HAP source to the control device, the Permittee shall demonstrate upon inspection that the criteria of VI.A.7.f.(1)(a) and VI.A.7.f.(1)(b) or VI.A.7.f.(1)(c) VR/FD are met.

- (a) The equipment shall be vented to a control device.
 - (b) The control device efficiency (E or H_{sys} , as applicable) determined using equation 10 or equations 12 and 13, respectively, and the test methods and procedures specified in VI.A.7.i through n, shall be equal to or greater than the overall HAP control efficiency required by I.A.10.d, I.A.11.c, or I.A.12.d.
 - (c) When a nonregenerative carbon adsorber is used, the ductwork from the affected emission point(s) shall be vented to the control device and the carbon adsorber shall be demonstrated, through the procedures of VI.A.7.a, b, c, d, or e, to meet the requirements of I.A.10.d, I.A.11.c, or I.A.12.d.
- g. Startups and shutdowns are normal operation for this source category. Emissions from these activities are to be included when determining if the standards specified in I.A.10.d, I.A.11.c, or I.A.12.d are being attained.
- h. A Permittee who uses compliance techniques other than those specified in this Permit shall submit a description of those compliance procedures, subject to the Administrator's approval.
- i. Either EPA Method 18 or EPA Method 25A of appendix A of Part 60, as appropriate to the conditions at the site, shall be used to determine VOC and HAP concentration of air exhaust streams as required by VI.A.7.a through f. The Permittee shall submit notice of the intended test method to the Administrator for approval along with the notification of the performance test required under XVII.B of Part A. Method selection shall be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. Except as indicated in VI.A.7.i.(1) and (2), the test shall consist of three separate runs, each lasting a minimum of 30 minutes.
- (1) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual carbon adsorber vessels pursuant to VI.A.7.b or d, the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all of the individual carbon adsorber vessels. When notifying the control officer pursuant to VI.A.17.a of the intention to conduct this test, the Permittee shall specify the EPA Test Method to be used and shall define the adsorption cycle for each of the individual carbon adsorber vessels.
 - (2) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon

adsorption system with individual exhaust stacks for each carbon adsorber vessel pursuant to VI.A.7.c or d, each carbon adsorber vessel shall be tested individually. The test for each carbon adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles. When notifying the control officer pursuant to VI.A.17.a of the intention to conduct this test, the Permittee shall specify the EPA Test Method to be used and shall define the adsorption cycle for each of the individual carbon adsorber vessels.

- j. EPA Method 1 or 1A of appendix A of Part 60 is used for sample and velocity traverses.
 - k. EPA Method 2, 2A, 2C, or 2D of appendix A of Part 60 is used for velocity and volumetric flow rates.
 - l. EPA Method 3 of appendix A of Part 60 is used for gas analysis.
 - m. EPA Method 4 of appendix A of Part 60 is used for stack gas moisture.
 - n. EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.
8. Overall VOC and/or organic HAP control efficiency--control devices other than carbon adsorbers. Calculate the overall control efficiency of a control system with a control device other than a carbon adsorber using the following procedure. [Applicable to Primer and Topcoat Application Operations, Organic HAP and VOC Emissions, AOS #3, Depainting Operations, AOS #2, and Chemical Milling Maskant Application Operations, AOS #1] [40 CFR, §63.750(h)]
- a. Calculate the overall control efficiency using equation 15:

$$E_k = R_k F_k \quad \text{Eq. 15}$$

where

E_k = overall VOC and/or organic HAP control efficiency (expressed as a decimal) of control system k.

R_k = destruction or removal efficiency (expressed as a decimal) of total organic compounds or total organic HAP for control device k as determined under VI.A.8.b.

F_k = capture efficiency (expressed as a decimal) of capture system k as determined under VI.A.8.c.

- b. The organic HAP destruction or removal efficiency R_k of a control device other than a carbon adsorber shall be determined using the procedures described below. The destruction efficiency may be measured as either total organic HAP or as TOC minus methane and ethane according to these procedures.

- (1) Use Method 1 or 1A of 40 CFR Part 60, appendix A, as appropriate, to select the sampling sites.
- (2) Determine the gas volumetric flow rate using Method 2, 2A, 2C, or 2D of 40 CFR Part 60, appendix A, as appropriate.
- (3) Use Method 18 of 40 CFR Part 60, appendix A, to measure either TOC minus methane and ethane or total organic HAP. Alternatively, any other method or data that have been validated according to the applicable procedures in Method 301 of this part may be used.
- (4) Use the following procedure to calculate the destruction or removal efficiency:
 - (a) The destruction or removal efficiency test shall consist of three runs. The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, the samples shall be taken at approximately equal intervals in time such as 15-minute intervals during the run.
 - (b) Calculate the mass rate of either TOC (minus methane and ethane) or total organic HAP (E_i , E_o using equations 16 and 17:

$$E_i = K_2 \left(\sum_{j=1}^n C_{ij} M_{ij} \right) Q_i \quad \text{Eq. 16}$$

$$E_o = \left(\sum_{j=1}^n C_{oj} M_{oj} \right) Q_o \quad \text{Eq. 17}$$

where

E_i , E_o = mass rate of TOC (minus methane and ethane) or total organic HAP at the inlet and outlet of the control device, respectively, dry basis, kg/hr.

K_2 = constant, 2.494×10^{-6} (parts per million)⁻¹ (gram-mole per standard cubic meter) (kilogram/gram) (minute/hour), where standard temperature for (gram-mole per standard cubic meter) is 20°C.

n = number of sample components in the gas stream.

C_{ij} , C_{oj} = concentration of sample component j of the gas stream at the inlet and outlet of the control device, respectively, dry basis, parts per million by volume.

M_{ij} , M_{oj} = molecular weight of sample component j of the gas stream at the inlet and outlet of the control device, respectively, gram/gram-mole.

Q_i , Q_o = flow rate of gas stream at the inlet and outlet of the control device, respectively, dry standard cubic meter per minute.

- (i) Where the mass rate of TOC is being calculated, all organic compounds (minus methane and ethane) measured by EPA Method 18 shall be summed using equation 16 in VI.A.8.b.(4)(b).
 - (ii) Where the mass rate of total organic HAP is being calculated, only the organic HAP species shall be summed using equation 17 in VI.A.8.b.(4)(b). The list of organic HAP is provided in 40 CFR, Subpart F, table 2.
- (c) Calculate the destruction or removal efficiency for TOC (minus methane and ethane) or total organic HAP using equation 18:

$$R = \frac{E_i - E_o}{E_i} \times 100 \quad \text{Eq. 18}$$

where

R=destruction or removal efficiency of control device, percent.

E_i = mass rate of TOC (minus methane and ethane) or total organic HAP at the inlet to the control device as calculated under VI.A.8.b.(4)(b), kg TOC per hour or kg organic HAP per hour.

E_o = mass rate of TOC (minus methane and ethane) or total organic HAP at the outlet of the control device, as calculated under VI.A.8.b.(4)(b), kg TOC per hour or kg organic HAP per hour.

- c. Determine the capture efficiency F_k of each capture system to which organic HAP and VOC emissions from coating operations are vented. The capture efficiency value shall be determined using Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure as found in appendix B to § 52.741 of 40 CFR Part 52 for total enclosures, and the capture efficiency protocol specified in § 52.741(a)(4)(iii) of 40 CFR Part 52 for all other enclosures.

9. General. [40 CFR, §63.750(i)]
- a. Alternative application method--primers and topcoats. Each Permittee seeking to use an alternative application method (as allowed in I.A.10.f.(1)(i)) in complying with the standards for primers and topcoats shall use the procedures specified in VI.A.9.b.(1) and (2) and (3) to determine the organic HAP and VOC emission levels of the alternative

application technique as compared to either HVLP or electrostatic spray application methods.

b. General.

- (1) For the process or processes for which the alternative application method is to be used, the total organic HAP and VOC emissions shall be determined for an initial 30-day period, the period of time required to apply coating to five completely assembled aircraft, or a time period approved by the permitting agency. During this initial period, only HVLP or electrostatic spray application methods shall be used. The emissions shall be determined based on the volumes, organic HAP contents (less water), and VOC contents (less water and exempt solvents) of the coatings as applied.
- (2) Upon implementation of the alternative application method, use the alternative application method in production on actual production parts or assemblies for a period of time sufficient to coat an equivalent amount of parts and assemblies with coatings identical to those used in the initial 30-day period. The actual organic HAP and VOC emissions shall be calculated for this post-implementation period.
- (3) Test the proposed application method against either HVLP or electrostatic spray application methods in a laboratory or pilot production area, using parts and coatings representative of the process(es) where the alternative method is to be used. The laboratory test will use the same part configuration(s) and the same number of parts for both the proposed method and the HVLP or electrostatic spray application methods.
- (4) Whenever the approach in either VI.A.9.b.(2) or (3) is used, the Permittee shall calculate both the organic HAP and VOC emission reduction using equation:

$$P = \frac{E_b - E_a}{E_b} \times 100 \quad \text{Eq.19}$$

where:

P=organic HAP or VOC emission reduction, percent.

E_b = organic HAP or VOC emissions, in pounds, before the alternative application technique was implemented, as determined under VI.A.9.b.(1).

E_a = organic HAP of VOC emissions, in pounds, after the alternative application technique was implemented, as determined under VI.A.9.b.(2).

- c. Each Permittee seeking to demonstrate that an alternative application method achieves emission reductions equivalent to HVLP or electrostatic spray application methods shall comply with the following:
 - (1) Each coating shall be applied such that the dried film thickness is within the range specified by the applicable specification(s) for the aerospace vehicle or component being coated.
 - (2) If no such dried film thickness specification(s) exists, the Permittee shall ensure that the dried film thickness applied during the initial 30-day period is equivalent to the dried film thickness applied during the alternative application method test period for similar aerospace vehicles or components.
 - (3) Failure to comply with these dried film thickness requirements shall invalidate the test results obtained under VI.A.9.b.(1).

10. Spot stripping and decal removal. Each Permittee seeking to comply with I.A.11.b.3 shall determine the volume of organic HAP-containing chemical strippers or alternatively the weight of organic HAP used per aircraft using the procedure specified in VI.A.10.a through c. [40 CFR, §63.750(j)]

- a. For each chemical stripper used for spot stripping and decal removal, determine for each annual period the total volume as applied or the total weight of organic HAP using the procedure specified in VI.A.4.b.
- b. Determine the total number of aircraft for which depainting operations began during the annual period as determined from company records.
- c. Calculate the annual average volume of organic HAP-containing chemical stripper or weight of organic HAP used for spot stripping and decal removal per aircraft using equation 20 (volume) or equation 21 (weight):

$$C = \frac{\sum_{i=1}^n V_{si}}{A} \quad \text{Eq.20}$$

where:

C=annual average volume (gal per aircraft) of organic HAP-containing chemical stripper used for spot stripping and decal removal.

n=number of organic HAP-containing chemical strippers used in the annual period.

V_{si} = volume (gal) of organic HAP-containing chemical stripper (i) used during the annual period.

A = number of aircraft for which depainting operations began during the annual period.

$$C = \frac{\sum_{i=1}^n \left(V_{si} D_{hi} \left(\sum_{i=1}^m W_{hi} \right) \right)}{A} \quad \text{Eq. 21}$$

where:

C = annual average weight (lb per aircraft) of organic HAP (chemical stripper) used for spot stripping and decal removal.

m = number of organic HAP contained in each chemical stripper, as applied.

n = number of organic HAP-containing chemical strippers used in the annual period.

W_{hi} = weight fraction (expressed as a decimal) of each organic HAP (i) contained in the chemical stripper, as applied, for each aircraft depainted.

D_{hi} = density (lb/gal) of each organic HAP-containing chemical stripper (i), used in the annual period.

V_{si} = volume (gal) of organic HAP-containing chemical stripper (i) used during the annual period.

A = number of aircraft for which depainting operations began during the annual period.

11. Organic HAP content level determination--compliant chemical milling maskants. For those uncontrolled chemical milling maskants complying with the chemical milling maskant organic HAP content limit specified in I.A.12.c.(1) without being averaged, the following procedures shall be used to determine the mass of organic HAP emitted per unit volume of coating (chemical milling maskant) i as applied (less water), H_i (lb/gal). [40 CFR, §63.750(k)]
 - a. For coatings that contain no exempt solvents, determine the total organic HAP content using manufacturer's supplied data or Method 24 of 40 CFR Part 60, appendix A to determine the VOC content. The VOC content shall be used as a surrogate for total HAP content for coatings that contain no exempt solvent. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 24 analysis, compliance shall be based on the results from the Method 24 analysis.
 - b. When Method 24 is used to determine the VOC content of water-reducible coatings, the precision adjustment factors in Reference Method 24 shall be used. If the adjusted analytical VOC content is less than the formulation solvent content, then the analytical VOC content should be set equal to the formulation solvent content.

12. Organic HAP content level determination--averaged chemical milling maskants. For those uncontrolled chemical milling maskants that are averaged together in order to comply with the chemical milling maskant organic HAP content level specified in I.A.12.c.(1), the procedure specified in VI.A.12.a through d shall be used to determine the monthly volume-weighted average mass of organic HAP emitted per volume of chemical milling maskant (less water) as applied, unless the permitting agency specifies a shorter averaging period as part of an ambient ozone control program. [40 CFR, §63.750(l)]

- a. Determine the total organic HAP weight fraction as applied of each chemical milling maskant used during each 30-day period using the procedure specified in VI.A.4.(a)(1).
- b. Determine for each 30-day period:
 - (1) The individual volume of each chemical milling maskant applied in terms of total gallons (less water) (using the procedure specified in VI.A.4.(b)(1), and
 - (2) The total volume in gallons of all chemical milling maskants (less water) as applied by summing the individual volumes of each chemical milling maskant as applied (less water).
- c. Determine the density of each chemical milling maskant as applied used during each 30-day period using the procedure specified in VI.A.4.c.(1).
- d. Calculate the volume-weighted average mass of organic HAP emitted per unit volume (lb/gal) of chemical milling maskant (less water) as applied for all chemical milling maskants during each 30-day period using equation 22:

$$H_a = \frac{\sum_{i=1}^n W_{Hi} D_{mi} V_{mi}}{M_{lw}} \quad \text{Eq. 22}$$

where

H_a = volume-weighted mass of organic HAP emitted per unit volume of chemical milling maskants (lb/gal) (less water) as applied during each 30-day period for those chemical milling maskants being averaged.

n = number of chemical milling maskants being averaged.

W_{Hi} = weight fraction (expressed as a decimal) of organic HAP in chemical milling maskant i (less water) as applied during each 30-day period that is averaged.

D_{mi} = density (lb chemical milling maskant per gal coating) of chemical milling maskant i as applied during each 30-day period that is averaged.

V_{mi} = volume (gal) of chemical milling maskant i (less water) as applied during the 30-day period that is averaged.

M_{lw} = total volume (gal) of all chemical milling maskants (less water) as applied during each 30-day period that is averaged.

13. VOC content level determination--compliant chemical milling maskants. For those uncontrolled chemical milling maskants complying with the chemical milling maskant VOC content limit specified in i.a.12.C.(2) without being averaged, the procedure specified in VI.A.13.a and b shall be used to determine the mass of VOC emitted per volume of chemical milling maskant (less water and exempt solvents) as applied. [40 CFR, §63.750(m)]

- a. Determine the mass of VOC emitted per unit volume of chemical milling maskant (lb/gal) (less water and exempt solvents) as applied, G_i for each chemical milling maskant using the procedures specified in VI.A.5.a and b.
 - b. General.
 - (1) If the VOC content is found to be different when EPA Method 24 is used during an enforcement inspection from that used by the Permittee in calculating G_i , compliance shall be based, except as provided in VI.A.13.b(2), upon the VOC content obtained using EPA Method 24.
 - (2) If the VOC content of a chemical milling maskant obtained using EPA Method 24 would indicate noncompliance as determined under II.H.3.a, the Permittee may elect to average the chemical milling maskant with other uncontrolled chemical milling maskants and (re)calculate G_a (using the procedure specified in VI.A.14, provided appropriate and sufficient records were maintained for all chemical milling maskants included in the average recalculation. The (re)calculated value of G_a for the averaged chemical milling maskants shall then be used to determine compliance.
14. VOC content level determination--averaged chemical milling maskants. For those uncontrolled chemical milling maskants that are averaged together in order to comply with the chemical milling maskant VOC content limit specified in I.A.12.c.(2), the procedure specified in VI.A.14.a through d shall be used to determine the monthly volume-weighted average mass of VOC emitted per volume of chemical milling maskant (less water and exempt solvents) as applied, unless the permitting agency specifies a shorter averaging period as part of an ambient ozone control program. [40 CFR, §63.750(n)]
- a. Determine the VOC content of each chemical milling maskant (less water and exempt solvents) as applied used during each 30-day period using the procedure specified in VI.A.6.a.(1).
 - b. General.
 - (1) Determine the individual volume of each chemical milling maskant applied in terms of total gallons (less water and exempt solvents) using the procedure specified in VI.A.6.a.(2), and
 - (2) Calculate the total volume in gallons of all chemical milling maskants (less water and exempt solvents) as applied by summing the individual volumes of each chemical milling maskant (less water and exempt solvents) as applied.
 - c. Calculate the volume-weighted average mass of VOC emitted per unit volume (lb/gal) of chemical milling maskant (less water and exempt solvents) as applied during each 30-day period using equation 23:

$$G_a = \frac{\sum_{i=1}^n (\text{VOC})_{mi} V_{mi}}{M_{lwes}} \quad \text{Eq. 23}$$

where

G_a = volume-weighted average mass of VOC per unit volume of chemical milling maskant (lb/gal) (less water and exempt solvents) as applied during each 30-day period for those chemical milling maskants that are averaged.

n = number of chemical milling maskants being averaged.

$(\text{VOC})_{mi}$ = VOC content (lb/gal) of chemical milling maskant i (less water and exempt solvents) as applied during the 30-day period that is averaged.

V_{mi} = volume (gal) of chemical milling maskant i (less water and exempt solvents) as applied during the 30-day period that is averaged.

M_{lwes} = total volume (gal) of all chemical milling maskants (less water and exempt solvents) as applied during each 30-day period that is averaged.

d. General.

- (1) If the VOC content is found to be different when EPA Method 24 is used during an enforcement inspection from that used by the Permittee in calculating G_a , recalculation of G_a is required using the new value. If more than one chemical milling maskant is involved, the recalculation shall be made once using all of the new values.
- (2) If recalculation is required, the Permittee may elect to include in the recalculation of G_a uncontrolled chemical milling maskants that were not previously included provided appropriate and sufficient records were maintained for these other chemical milling maskants to allow daily recalculations.
- (3) The recalculated value of G_a under either VI.A.14.d.(1) or (2) shall be used to determine compliance.

15. Inorganic HAP emissions--dry particulate filter certification requirements. Dry particulate filters used to comply with I.A.10.g.(2) or I.A.11.b.(4) must be certified by the filter manufacturer or distributor, paint/depainting booth supplier, and/or the Permittee using method 319 in appendix A of subpart A of 40 CFR Part 63, to meet or exceed the efficiency data points found in Tables 1 and 2, or 3 and 4 of I.A.10.g.(2) for existing or new sources respectively. [40 CFR, §63.750(o)]

16. Applicability and performance test dates. [40 CFR, §63.7(a)]

- a. Unless otherwise specified, this section applies to the Permittee required to do performance testing, or another form of compliance demonstration, under a relevant standard.

- b. If required to do performance testing by a relevant standard, and unless a waiver of performance testing is obtained, the Permittee shall perform such tests as follows--
- (1) Within 180 days after the effective date of a relevant standard for a new source that has an initial startup date before the effective date; or
 - (2) Within 180 days after initial startup for a new source that has an initial startup date after the effective date of a relevant standard; or
 - (3) Within 180 days after the compliance date specified in this Permit for an existing source subject to an emission standard established pursuant to section 112(d) of the Act, or within 180 days after startup of an existing source if the source begins operation after the effective date of the relevant emission standard; or
 - (4) Within 180 days after the compliance date for an existing source subject to an emission standard established pursuant to section 112(f) of the Act; or
 - (5) Within 180 days after the termination date of the source's extension of compliance for an existing source that obtains an extension of compliance under 40 CFR, §63.6(i); or
 - (6) Within 180 days after the compliance date for a new source, subject to an emission standard established pursuant to section 112(f) of the Act, for which construction or reconstruction is commenced after the proposal date of a relevant standard established pursuant to section 112(d) of the Act but before the proposal date of the relevant standard established pursuant to section 112(f); or
 - (7) When an emission standard in this Permit is more stringent than the standard proposed, Permittee of a new or reconstructed source subject to that standard for which construction or reconstruction is commenced between the proposal and promulgation dates of the standard shall comply with performance testing requirements within 180 days after the standard's effective date, or within 180 days after startup of the source, whichever is later. If the promulgated standard is more stringent than the proposed standard, the Permittee may choose to demonstrate compliance with either the proposed or the promulgated standard. If the Permittee chooses to comply with the proposed standard initially, the Permittee shall conduct a second performance test within 3 years and 180 days after the effective date of the standard, or after startup of the source,

whichever is later, to demonstrate compliance with the promulgated standard.

- c. The Administrator may require the Permittee to conduct performance tests at the affected source at any other time when the action is authorized by section 114 of the Act.

17. Notification of performance test. [40 CFR, §63.7(b)]

- a. The Permittee shall notify the Administrator and control officer in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator and control officer, upon request, to review and approve the site-specific test plan and to have an observer present during the test. Observation of the performance test by the Administrator and control officer is optional.
- b. In the event the Permittee is unable to conduct the performance test on the date specified in the notification requirement, due to unforeseeable circumstances beyond his or her control, the Permittee shall notify the Administrator and control officer within 5 days prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the Permittee of legal responsibility for compliance with any other applicable provisions of this Permit or with any other applicable Federal, State, or local requirement, nor will it prevent the Administrator or control officer from implementing or enforcing this Permit or taking any other action under the Act.

18. Use of an alternative test method. [40 CFR, §63.7(f)]

- a. General. Until permission to use an alternative test method has been granted by the Administrator, the Permittee remains subject to the requirements of this section and the relevant standard.
- b. The Permittee who is required to do performance testing by a relevant standard may use an alternative test method from that specified in the standard provided that the Permittee--
 - (1) Notifies the Administrator and control officer of his or her intention to use an alternative test method not later than with the submittal of the site-specific test plan (if requested by the Administrator) or at least 60 days before the performance test is scheduled to begin if a site-specific test plan is not submitted;
 - (2) Uses Method 301 in appendix A of 40 CFR Part 63 to validate the alternative test method; and
 - (3) Submits the results of the Method 301 validation process along with the notification of intention and the justification for not using the specified test method. The Permittee may submit the

information required in this paragraph well in advance of the deadline specified in VI.A.18.b.(1) to ensure a timely review by the Administrator in order to meet the performance test date specified in this section or the relevant standard.

- c. The Administrator will determine whether the Permittee's validation of the proposed alternative test method is adequate when the Administrator approves or disapproves the site-specific test plan. If the Administrator finds reasonable grounds to dispute the results obtained by the Method 301 validation process, the Administrator may require the use of a test method specified in a relevant standard.
- d. If the Administrator finds reasonable grounds to dispute the results obtained by an alternative test method for the purposes of demonstrating compliance with a relevant standard, the Administrator may require the use of a test method specified in a relevant standard.
- e. If the Permittee uses an alternative test method for an affected source during a required performance test, the Permittee shall continue to use the alternative test method for subsequent performance tests at that affected source until he or she receives approval from the Administrator to use another test method.
- f. Neither the validation and approval process nor the failure to validate an alternative test method shall abrogate the Permittee's responsibility to comply with the requirements of this Permit.

19. Data analysis, recordkeeping, and reporting. [40 CFR, §63.7(g)]

- a. Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions, and raw data. A performance test is "completed" when field sample collection is terminated. The Permittee shall report the results of the performance test to the Administrator and control officer before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator. The results of the performance test shall be submitted as part of the notification of compliance status. Before a title V permit has been issued to the Permittee, the Permittee shall send the results of the performance test to the Administrator. After a title V permit has been issued to the Permittee, the Permittee shall send the results of the performance test to the appropriate permitting authority.
- b. For a minimum of 5 years after a performance test is conducted, the Permittee shall retain and make available, upon request, for inspection by the Administrator the records or results of such performance test and other data needed to determine emissions from an affected source.

B. Stationary Rotating Machinery. [PCC 17.16.340.K]

1. To determine compliance with the standards prescribed in I.B of this Permit, the following reference methods shall be used:
 - a. Reference Method 20 in 40 CFR 60, Appendix A for the concentration of sulfur dioxide and oxygen.
 - b. ASTM Method D-129-91 (Test Method for Sulfur in Petroleum Products) (General Bomb Method) for the sulfur content of liquid fuels.
 - c. ASTM Method D-1072-90 (Test Method for Total Sulfur in Fuel Gases) for the sulfur content of gaseous fuels.
 2. To determine the sulfur content of the fuel being fired for purposes of the reporting requirement in III.B.4 of this Permit, the following reference methods in the Arizona Testing Manual shall be used:
 - a. ASTM Method D-129-91 (Test Method for Sulfur in Petroleum Products) (General Bomb Method) for the sulfur content of liquid fuels.
 - b. ASTM Method D-1072-90 (Test Method for Total Sulfur in Fuel Gases) for the sulfur content of gaseous fuels.
 3. EPA Test Method 9 shall be used to monitor compliance with the opacity standard at I.B.2. [PCC 17.20.010]
- C. Abrasive Blasting Operations. EPA Test Method 9 shall be used to monitor compliance with the opacity standard at I.J.1. [PCC 17.20.010]

Part "C": APPLICABLE REGULATIONS
Air Quality Control Permit Number 825
For
Learjet, Inc.

REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE

Compliance with the terms and conditions contained in this permit shall be deemed compliance with the following federally applicable requirements in effect on the date of permit issuance:

Code of Federal Regulations, Title 40

- | | |
|---------------------------|--|
| 40 CFR Part 63 Subpart A | General Provisions (§§63.4(a)(2), 63.4(b), 63.6(e), 63.6(f), 63.6(g), 63.7(a) 63.7(b), 63.7(f), 63.7(g), 63.9(b), 63.9(e), 63.9(h), 63.9(j), 63.10(a)(4)(ii), 63.10(a)(5) 63.10(b), 63.10(d)(5)(i), 63.10(d)(5)(ii), 63.12(c), 63.13(c)) |
| 40 CFR Part 63 Subpart GG | National Emission Standards for Aerospace Manufacturing and Rework Facilities (§§63.741(a), 63.741(b), 63.741(c), 63.741(d), 63.741(e), 63.741(f), 63.741(g), 63.741(i), 63.744(a), 63.744(b), 63.744(c), 63.745(a), 63.745(b), 63.745(c), 63.745(d), 63.745(e), 63.745(f), 63.745(g), 63.746(a), 63.746(b), 63.746(c), 63.747(a), 63.747(b), 63.747(c), 63.747(d), 63.747(e), 63.748, 63.749(a)(2), 63.749(b), 63.749(c), 63.749(d), 63.749(e), 63.749(f), 63.749(g), 63.749(h), 63.749(i), 63.750(b), 63.750(c), 63.750(d), 63.750(e), 63.750(f), 63.750(g), 63.750(h), 63.750(i), 63.750(j), 63.750(k), 63.750(l), 63.750(m), 63.750(n), 63.750(o), 63.751(a), 63.751(b), 63.751(c), 63.751(e), 63.751(f), 63.752(a), 63.752(b), 63.752(c), 63.752(d), 63.752(e), 63.752(f), 63.753(a), 63.753(b), 63.753(c), 63.753(d), 63.753(e)) |
| 40 CFR Part 82 Subpart F | Protection of Stratospheric Ozone - Recycling and Emissions Reduction |

Pima County SIP:

- | | |
|----------|--|
| Rule 314 | Petroleum Liquids |
| Rule 316 | Particulates Materials (Subsections A, C, D) |
| Rule 321 | Emissions Discharge Opacity Limiting Standards - Standards and Applicability (Includes NESHAP) |
| Rule 332 | Compilation of Mass Rates and Concentrations (NESHAPS) |
| Rule 343 | Visibility Limiting Standard |
| Rule 344 | Odor Limiting Standards |

Compliance with the terms contained in this permit shall be deemed compliance with the following non-federally applicable requirements in effect on the date of permit issuance:

Pima County Code (PCC) Title 17:

- | | |
|------------|--|
| 17.16.050 | Visibility Limiting Standard |
| 17.16.100. | Particulate Materials |
| 17.16.165 | Standards of Performance for Fossil-Fuel Fired Industrial and Commercial Equipment |
| 17.16.230 | Standards of Performance for Storage Vessels for Petroleum Liquids |

- 17.16.340 Standards of Performance for Stationary Rotating Machinery
- 17.16.400 Organic Solvents and Other Organic Materials (Sections A and C)
- 17.16.430 Standards of Performance for Unclassified Sources
- 17.16.530 National Emissions Standards for Hazardous Air Pollutants

Part "D": EQUIPMENT LIST

Air Quality Control Permit Number 825

Learjet, Inc.

Description	Capacity	Location
Industrial Air Furnace Roof Heater (natural gas fired)	2,875,000 Btu/hr	Bd 3
Industrial Air Furnace Roof Heater (natural gas fired)	2,875,000 Btu/hr	Bd 3
Industrial Air Furnace Roof Heater (natural gas fired)	2,875,000 Btu/hr	Bd 3
Industrial Air Furnace Roof Heater (natural gas fired)	2,875,000 Btu/hr	Bd 3
Reznor Heaters (natural gas fired)	130,000 Btu/hr	Bd 3
Reznor Heaters (natural gas fired)	130,000 Btu/hr	Bd 3
Reznor Heaters (natural gas fired)	130,000 Btu/hr	Bd 3
Reznor Heaters (natural gas fired)	130,000 Btu/hr	Bd 3
Reznor Heaters (natural gas fired)	130,000 Btu/hr	Bd 3
Reznor Heaters (natural gas fired)	130,000 Btu/hr	Bd 3
Reznor Heaters (natural gas fired)	130,000 Btu/hr	Bd 3
Reznor Heaters (natural gas fired)	130,000 Btu/hr	Bd 3
Reznor Heaters (natural gas fired)	130,000 Btu/hr	Bd 3
Industrial Air Furnace Roof Heater (natural gas fired)	425,000 Btu/hr	Bd 3
Industrial Air Furnace Roof Heater (natural gas fired)	425,000 Btu/hr	Bd 3
Industrial Air Furnace Roof Heater (natural gas fired)	750,000 Btu/hr	Bd 3
Industrial Air Furnace Roof Heater (natural gas fired)	510,400 Btu/hr	Bd 3
Kohler Emergency Generator (diesel fired)	235 kW (315 hp)	Bd 3
Trane Roof Heater (natural gas fired)	120,000 Btu/hr	Bd 3
Trane Roof Heater (natural gas fired)	120,000 Btu/hr	Bd 3
Trane Roof Heater (natural gas fired)	120,000 Btu/hr	Bd 3
Trane Roof Heater (natural gas fired)	120,000 Btu/hr	Bd 3
Trane Roof Heater (natural gas fired)	100,000 Btu/hr	Bd 3
Trane Roof Heater (natural gas fired)	100,000 Btu/hr	Bd 3
Trane Roof Heater (natural gas fired)	75,000 Btu/hr	Bd 3
Trane Roof Heater (natural gas fired)	50,000 Btu/hr	Bd 3
Trane Roof Heater (natural gas fired)	150,000 Btu/hr	Bd 3
Trane Roof Heater (natural gas fired)	250,000 Btu/hr	Bd 3
Paint Booth (small parts)	7,000 cfm	Bd 3
Glue Booth 1	20,150 cfm	Bd 3
Emergency Fire Pump Engine (diesel fired)	380 kW (510 hp)	Bd 5
Emergency Fire Pump Engine (diesel fired)	380 kW (510 hp)	Bd 5
Emergency Fire Pump Engine (diesel fired)	380 kW (510 hp)	Bd 5
Emergency Fire Pump Engine (diesel fired)	380 kW (510 hp)	Bd 5
Emergency Fire Pump Engine (diesel fired)	380 kW (510 hp)	Bd 5
Boiler (natural gas fired)	1,155,000 Btu/hr	Bd B
Glue Booth	12,000 cfm	Bd B
Parts Cleaner	20 gallons	Bd B
Honda Portable Emergency Generator (gasoline fired)	15 kW (20 hp)	Bd B
Despatch Oven (bonding)	Electric	Bd C
Plastic Mold Tooling Table	Electric	Bd C
Plastic Mold Tooling Table	Electric	Bd C
Vacuum Plastic Molding Machine	Electric	Bd C
Heating Oven (water drying)	Electric	Bd C
Heating Oven (water drying)	Electric	Bd C
Resin Mixing (vented inside)	Electric	Bd C
Sellers Boiler (natural gas fired)	8,370,000 Btu/hr	Bd D
Paint Booth #1 (detail paint)	12,000 cfm	Bd D
Glue Booth	12,000 cfm	Bd D
Paint Booth #2 (interiors glue and laminate)	12,000 cfm	Bd D
Paint Booth #3 (interiors paint)	12,000 cfm	Bd D
Abrasive Blasting Unit (detail paint -enclosed system)	NA	Bd D

Paint Booth #4 - Sprayking	15,000 cfm	Bd D (north)
Parts Cleaner	30 gallons	Bd D (avionics)
State Hot Water Heater (natural gas fired)	30,000 Btu/hr	Bd E
Paint Booth 4	36,000 cfm	Bd E
Paint Booth 1	140,000 cfm	Bd E
Paint Booth 2	124,000 cfm	Bd E
Paint Booth 3	124,000 cfm	Bd E
Paint Booth Heaters (several units) (natural gas fired)	42,000,000 Btu/hr	Bd E
Paint Mixing Rooms	NA	Bd E
Enclosed Paint Gun Cleaner	10 gallons	Bd E
Cyclo Blasting Equipment (sand media)	3 gallons	Bd F (portable)
Cyclo Blasting Equipment (sand media)	3 gallons	Bd F (portable)
Cyclo Blasting Equipment (sand media)	3 gallons	Bd F (portable)
Yarco Steam Cleaner (diesel fired)	240,000 Btu/hr	Bd F
Yarco Steam Cleaner (diesel fired)	240,000 Btu/hr	Bd F
Aircraft Depainting (hydrogen peroxide)	NA	Bd F
Reznor Space Heater (natural gas fired)	100,000 Btu/hr	Bd F
Reznor Space Heater (natural gas fired)	100,000 Btu/hr	Bd F
Onan Emergency Generator (diesel fired)	84 kW (112 hp)	Bd F (south)
Peerless Boiler (natural gas fired)	2,111,800 Btu/hr	Bd H
Paint Booth (gluing and painting)	12,000 cfm	Bd H
Roof Heater (natural gas fired)	75,000 Btu/hr	Bd H
Carrier Dual PAC (roof) (natural gas fired)	150,000 Btu/hr	Bd H
Carrier Dual PAC (roof) (natural gas fired)	225,000 Btu/hr	Bd H
Carrier Dual PAC (roof) (natural gas fired)	225,000 Btu/hr	Bd H
McGraw Edison Heater/Cooler (natural gas fired)	400,000 Btu/hr	Bd H
State Hot Water Heater (natural gas fired)	270,000 Btu/hr	Bd H
Stove With 7-Burner Oven (natural gas fired)	150,000 Btu/hr	Bd H (cafeteria)
Griddle and 2-Burner Oven (natural gas fired)	110,000 Btu/hr	Bd H (cafeteria)
Burn Test Lab (propane fired)	NA	Bd H (east)
Radiant Heaters (natural gas fired) (16 units)	50,000 Btu/hr each	Bd J
Radiant Heaters (natural gas fired) (4 units)	30,000 Btu/hr each	Bd J

Description	Capacity	Location
Parts Cleaner (3 units)	20 gallons each	Bd J
Paint Booth (aerosol can use)	300 cfm	Bd J
Trane Roof Heater (natural gas fired)	100,000 Btu/hr	Bd J
Trane Roof Heater (natural gas fired)	100,000 Btu/hr	Bd J
Trane Roof Heater (natural gas fired)	150,000 Btu/hr	Bd J
Trane Roof Heater (natural gas fired)	150,000 Btu/hr	Bd J
Abrasive Blasting (enclosed system)	NA	Bd J
Enclosed Paint Gun Cleaner	10 gallons	Bd K
Heating/Cooling Units (natural gas fired)	250,000 Btu/hr	Bd K
Heating/Cooling Units (natural gas fired)	250,000 Btu/hr	Bd K
Paint Booth 1 Heaters (several units) (natural gas fired)	20,000,000 Btu/hr	Bd K
Paint Booth 1	200,000 cfm	Bd K
Day and Night Heating Unit (natural gas fired)	200,000 Btu/hr	Bd L
Day and Night Heating Unit (natural gas fired)	200,000 Btu/hr	Bd L
Day and Night Heating Unit (natural gas fired)	200,000 Btu/hr	Bd L
Paint Booth (annex, facility support)	36,000 cfm	Bd L
Parts Washer	30 gallons	Bd L
Carpentry Shop	NA	Bd L
Fuel Storage Tank (unleaded gasoline) (above ground)	1,000 gallons	Bd L (west)
Fuel Storage Tank (diesel) (above ground)	1,000 gallons	Bd L (west)
Fuel Storage Tank (propane) (above ground)	1,000 gallons	Bd L (west)
Boiler (natural gas fired)	3,780,000	Bd S
Emergency Fire Pump Engines (diesel fired)	401 kW (538 hp)	Bd S (back)
Emergency Fire Pump Engines (diesel fired)	401 kW (538 hp)	Bd S (back)
Emergency Fire Pump Engines (diesel fired)	401 kW (538 hp)	Bd S (back)
Boiler (natural gas fired)	3,780,000 Btu/hr	Bd X
Enclosed Paint Gun Cleaner	10 gallons	Bd Y
Silk Screening Operation	NA	Bd Y
Paint Booth 1	270,000 cfm	Bd Y
Paint Booth 1 Heater (natural gas fired)	3,000,000 Btu/hr	Bd Y
Paint Booth 1 Heater (natural gas fired)	3,000,000 Btu/hr	Bd Y
Paint Booth 1 Heater (natural gas fired)	2,000,000 Btu/hr	Bd Y
Paint Booth 1 Heater (natural gas fired)	2,000,000 Btu/hr	Bd Y
Paint Booth 1 Heater (natural gas fired)	1,750,000 Btu/hr	Bd Y
Paint Booth 1 Heater (natural gas fired)	1,750,000 Btu/hr	Bd Y
Lambda Steam Cleaner (propane fired)	240,000 Btu	Bd Y
Lambda Steam Cleaner (propane fired)	240,000 Btu	Bd Y
Lambda Steam Cleaner (propane fired)	240,000 Btu	Bd Y
Lambda Steam Cleaner (propane fired)	240,000 Btu	Bd Y
Street Sweeper	NA	Gen Site
Street Sweeper	NA	Gen Site
Soldering Stations	NA	Various
Space Heaters (natural gas fired) (17 units)	140,000 Btu/hr each	Gen Site
Small Touch Up Spray Units (vent inside) several units)	NA	Gen Site
Hobart Aircraft Power Ground Unit (gasoline fired)	67 kW (90 hp)	Gen Site
Hobart Aircraft Power Ground Unit (gasoline fired)	67 kW (90 hp)	Gen Site
Detroit Aircraft Power Ground Unit (diesel fired)	67 kW (90 hp)	Gen Site
Hobart Aircraft Power Ground Unit (diesel fired)	179 kW (240 hp)	Gen Site
Deutz Portable Emergency Generator (diesel fired)	16.9 kW (23 hp)	Gen Site
Waste Oil Tank	500 gallons	Tank Farm
Fuel Storage Tank (Jet A fuel) built in 1953	20,000 gallons	Tank Farm
Fuel Storage Tank (with floating roof) (Jet A fuel) built in 1953	126,000 gallons	Tank Farm
Fuel Storage Tank (with floating pan) (Jet A fuel) built in 1984	100,000 gallons	Tank Farm
Waste Hydraulic Fluid Tank	500 gallons	Tank farm
Waste Fuel Tank	5,100 gallons	Tank Farm
Ozone Generator	NA	Wastewater