FLORIDA DEPARTMENT OF HEALTH

Charlie Crist
Governor

Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

NOVEMBER 19, 2010
ELECTRONIC CORRESPONDENCE
Steven.Bouley@pwr.utc.com

NOTICE OF FINAL PERMIT

United Technologies Corporation
17900 Beeline Highway (SR-710)
Jupiter, FL 33478

Air Construction Permit No. 0990021-020-AC
Project: Construction Permit
PALM BEACH COUNTY, FLORIDA

Authorized Representative:

Stephen Bouley, Vice President
Pratt & Whitney Rocketdyne, Launch Vehicle and Hypersonic Systems

Dear Mr. Bouley:

Enclosed is the above referenced air pollution construction permit to modify the permit of an air pollution source located in Palm Beach County. A revised technical determination is also enclosed. This permit is issued pursuant to Chapter 403.087 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code.

Any party to this order (permit) has the right to seek judicial review of it pursuant to Section 120.68, F.S., by filing a notice of appeal pursuant to Rule 9.110 of the Florida Rules of Appellate Procedure with: the legal office of the Palm Beach County Health Department at P.O. Box 29 (800 Clematis Street), West Palm Beach, Florida 33402-0029; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days after this order (permit) is filed with the clerk of the Health Department.

Executed in West Palm Beach, Florida
PALM BEACH COUNTY HEALTH DEPARTMENT

James E. Stormer, Q.E.P., Environmental Administrator
Air & Waste Section
Division of Environmental Public Health

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this FINAL AIR CONSTRUCTION PERMIT was sent by electronic mail (with Received Receipt) before the close of business on 11/19/10 to the person(s) listed:

Steven Bouley, UTC	email	Steven.Bouley@pwr.utc.com

In addition, the undersigned duly designated deputy agency clerk hereby certifies that a copy of this FINAL AIR CONSTRUCTION PERMIT was sent by electronic mail (with Received Receipt) on the same date to the person(s) listed or as otherwise noted:

Bryant Storey, P.E., Golder Associates, Inc.	email	Brian_Storey@golder.com
Bernardo Susi, P.E., Golder Associates, Inc.	email	bsusi@golder.com
Dean Gee, UTC/Pratt & Whitney	email	dean.gee@pw.utc.com
Lennon Anderson, P.E. Southeast District Office, FDEP	email	Lennon.Anderson@dep.state.fl.us

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52, Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

K [signature]
(Clerk)

11/19/10
(Filing Date)

FINAL DETERMINATION

Air Permit No. 0990021-020-AC

PERMITTEE:

United Technologies Corporation
P.O. Box: 109600, MS 717-03
West Palm Beach, FL 33410

Authorized Representative: Stephen Bouley, Vice President, Pratt & Whitney Rocketdyne, Launch Vehicle and Hypersonic Systems

PROJECT: Air construction permit is issued to change the designation of the facility from a Major source of Hazardous Air Pollutants to a Synthetic Minor source of HAPs.

Project Location:	SR 710, 17900 Beeline Highway, Jupiter, FL 33478
UTM Coordinates:	Zone 17; 568.41 km E; 2975.84 km N
Latitude:	26° 54′ 15″ North / Longitude: 80° 18′ 15″ West

COMMENTS AND REVISIONS

Draft permit was issued 08/23/2010. The public notice was published on 08/31/2010. We received comments from the permittee to add another emissions unit for Misc. Operations (**EU # 085**). We issued the Intent & Draft permit again on 10/20/2010. Based on some comments from DEP, we re-issued the intent on 10/25/2010. The Health Department received proof of publication on 11/08/2010 that the required PUBLIC NOTICE was published in the 11/03/2010 issue of The Palm Beach Post Newspaper.

One comment was received from the permittee regarding a typo in the specific condition 6.1 c. in Section II, Facility wide General conditions. We required the monthly record keeping from all emission units (Section III) to be completed by 20th of the following month. However, in Section II we inadvertently left 10 days requirement for completion of monthly recordkeeping. We correct this condition as specified below:

FROM:
SECTION II, Condition No. 6.1

c: The individual and total monthly HAP emissions for each material, calculated from the monthly material utilization and the individual and total HAP fraction, calculated for the preceding month no later than 10 days after the end of that month.

TO:

SECTION II, Condition No. 6.1

c: The individual and total monthly HAP emissions for each material, calculated from the monthly material utilization and the individual and total HAP fraction, calculated for the preceding month no later than **20** days after the end of that month.

FINAL ACTION

The final action of the Health Department is to issue the air pollution construction permit as proposed, with above-noted correction.

FLORIDA DEPARTMENT OF HEALTH

Charlie Crist
Governor

Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

OCTOBER 25, 2010
Electronic Correspondence
Steven.Bouley@pwr.utc.com

ISSUED TO (PERMITTEE):

United Technologies Corporation
17900 Beeline Highway (SR-710)
Jupiter, FL 33478

Authorized Representative:
Steven Bouley, Vice President
Pratt & Whitney Rocketdyne, Launch Vehicle and Hypersonic Systems

ARMS No.	0990021
Air Permit No.	0990021-020-AC
Issued:	**November 19, 2010**
Expires:	**November 18, 2011**

LOCATED AT:

Project Name: Construction Permit to change the status of the facility from Major for Hazardous Air Pollutants (HAPs) to Synthetic Minor for HAPs. This permit also combines Pratt & Whitney and Sikorsky facilities, since these are owned by the United Technologies Corporation. Currently, Pratt & Whitney has a Title V operating permit and Sikorsky has a Federally Enforceable State Operating Permit (FESOP).

Project Location: 17900 Beeline Highway (SR 710), Jupiter, FL 33478
UTM Coordinates: Zone 17; 564.9 km E; 2977.3 km N
Latitude: 26° 54′ 59″ North / **Longitude**: 80° 20′ 47″ West

STATEMENT OF BASIS:

The Florida Department of Environmental Protection (DEP) has permitting jurisdiction for this project pursuant to Section 403.087 of the Florida Statutes (F.S.). However, in accordance with Section 403.182, F.S., the DEP recognizes the Palm Beach County Health Department (Health Department) as the approved local air pollution control program in Palm Beach County. As such, the DEP and the Health Department have entered into a Specific Operating Agreement that authorizes the Health Department to issue or deny permits to for this type of air pollution source located in Palm Beach County. Accordingly, the Health Department issues this permit under the provisions of Chapter 403, F.S. and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The permittee is authorized to perform the work for the proposed project in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Health Department.

ISSUED BY:

Executed in West Palm Beach, Florida
PALM BEACH COUNTY HEALTH DEPARTMENT

James E. Stormer, Q.E.P., Environmental Administrator
Air & Waste Section
Division of Environmental Public Health

SECTION II. FACILITY-WIDE GENERAL CONDITIONS

PERMIT HISTORY

11/03/2010: Public Notice published
10/25/2010: Health Department reissued Draft permit and Intent to Issue
09/30/2010: Received comments from Permittee
08/23/2010: Health Department issued Draft permit and Intent to Issue
06/04/2010: Health Department received response to request for additional information
04/06/2010: Health Department issued a request for additional information
03/08/2010: Health Department received application for construction permit

PROJECT DESCRIPTION

Pratt & Whitney Rocketdyne (P&W), a division of United Technologies Corporation (UTC), and Sikorsky Aircraft Corporation (SAC), a subsidiary of UTC, operate adjacent facilities including an aerospace manufacturing, research and development facility located on a combined 7,000-acre site in rural northwest Palm Beach County, Florida. Pratt & Whitney West Palm Beach is the company's principal jet engine test facility, primarily dedicated to research and development. P&W has over 50 test stands specifically designed to perform evaluations of rocket engines, jet engines, as well as individual components for each type of engine. Cryogenic rocket engines are manufactured onsite and tested for quality assurance and research and development programs at the facility. Jet engines are tested for research and development programs. No jet engine manufacturing is performed at West Palm Beach.

P&W was issued a Title V air operation permit by the Health Department on July 17, 2004 (FDEP Permit No. 0990021-006-AV), and is designated as a major source of criteria pollutants, including nitrogen oxides (NOx) and carbon monoxide (CO). In addition, P&W is a major source of volatile organic compounds (VOC), as defined by Title V regulations.

SAC, which is located on the same campus but in wholly separate buildings, operates the Development Flight Center (DFC), which is the company's site for helicopter development testing. SAC also operates the Florida Assembly Flight Operation (FAFO), which assembles helicopters from parts delivered to the facility (in space rented from P&W). SAC was issued a Federally Enforceable State Operating Permit (FESOP) by Health Department on February 2, 2007 (FDEP Permit No. 0990185-004-AF) and is designated as a synthetic minor source for hazardous air pollutants (HAPs).

In a Request for Additional Information (RAI) letter dated April 29, 2009, FDEP deemed that P&W and SAC are under common control, and thus should have a common Title V air operating permit. Because of combining both operations in one permit, the applicant requested for an air construction permit to designate the combined facility as a synthetic minor source for HAPs along with the Title V permit renewal. Based on the permit application, this facility **is <u>not</u>** a major source of hazardous air pollutants (HAPs).

FOLLOWING IS THE LIST OF EMISSION UNITS AT THE FACILITY.

EU No.	R / U*/I**	Brief Description
Following emission units are located at Pratt & Whitney Rocketdyne (except as noted)		
001	I	Air compressors/heater (ACHR-2-B2) *[This EU is no longer in operation and is removed per Applicant's request]*
009	U	Diesel storage tanks
010	U	Jet fuel storage tanks
012	R	Jet fuel storage tank (F-8-CFF)
014	R	Paint spray booth (PS-1-TMC) used for refinishing support equipment
015	U	Closed-loop flush cleaning (BF-1-RL-10) using Vertrel MCA
016	R	Boiler (BO-12-E6) fired by natural gas – 42 MMBTU/hr Heat Input
018	U	Acid gas scrubbing system (AS-2-MPL) for plating operations

SECTION II. FACILITY-WIDE GENERAL CONDITIONS

EU No.	R / U*/I**	Brief Description
021	I	Alkali scrubbing system (AS-15-MPL) controls nickel and silver plating lines *[This EU is no longer in operation and is removed per Applicant's request]*
022	R	Boilers (BO-1-MBH, BO-2-MBH) fired by natural gas – 54 MMBTU/hr Heat Input per Boiler
031	U	Diesel storage tanks (DL-19-SEGF and DL-20-SEGF)
037	U	AST Gasoline storage tanks
040	U	Heat treatment furnaces (FU-3-MHT and FU-4-MHT) fired by natural gas
045	U	Water evaporator (EV-1-MW)
049	U	Plasma spray booths
053	I	Woodshop dust collector (DC-1-MM) [This EU is no longer in operation and is removed from the permit per Applicant's request]
059	U	Air and fuel heaters fired with natural gas
063	I	Woodshop dust collector (DC-1-RTF) *[This EU is no longer in operation and is removed per Applicant's request]*
064	R	Paint spray booth (PSB-1-RTF)
065	U	Diesel engines powering fire protection pumps and cooling water pumps during rocket engine testing and emergency electrical generators
066	R	Boiler (BO-14-E8) fired by propane subject – 6.7 MMBTU/Hr Heat Input
068	R	Emergency electrical generating facility
069	U	JP-8 Fueled Jet engine test stands – Test Area A/C
070	U	Aerospace hand-wiping operations
071	U	Aerospace spray gun cleaning operations
072	U	Aerospace flush cleaning operations
073	U	Aerospace primer and topcoat application operations
074	U	Aerospace waste storage and handling operations
075	I	LOX/Kerosene rocket engine test stand [This EU was never constructed and is removed from the permit per Applicant's request]
076	I	Kerosene Fuel Storage Tank [This EU was to support EU-075, was never constructed and is removed from the permit per Applicant's request]
077	R	Combustion turbine test stands – Fired by Natural Gas
078	R	Vertrel Vapor Degreaser
079	R	Two JP8 fired Turbine Engines powering air compressors used for jet engine tests (also known as RAM Test Facility)
080	R	E-8 Rocket Engine Test Stand – Methane Fuel Operations
Following emission units are located at Sikorsky Aircraft Corporation		
na	I	Inactive (EU 001 of Sikorsky permit – 0990185-004-AF)
na	I	Inactive (EU 002 of Sikorsky permit – 0990185-004-AF)
na	I	Inactive (transferred to ARMS EU No. 0990021-063)
na	I	Inactive (transferred to ARMS EU No. 0990021-064)
na	I	Inactive (spray booth PS-15-SIK has been removed) (EU 007 of Sikorsky permit – 0990185-004-AF)
081	R	SYK - Spray Booth (PS-14-SIK) for aerospace coating operations [Previously EU 006 in Sikorsky permit]
082	R	SYK - Spray Booth (PS-16-SIK) for aerospace coating operations [Previously EU 008 in Sikorsky permit]
na	I	Spray Booth (PS-13-SIK) (EU 010 of Sikorsky permit – 0990185-004-AF) Unit is removed
083	R	SYK - Boiler (BO-4-SIK)] fired by natural gas– 2.93 MMBTU/Hr Heat Input [Previously EU 009 in

SECTION II. FACILITY-WIDE GENERAL CONDITIONS

EU No.	R / U*/I**	Brief Description
		Sikorsky permit]
084	R	Alodine tank – about 10 gallon capacity
Following emission unit is used to track VOC emissions from miscellaneous activities at P&W and Sikorsky		
085	U	Miscellaneous VOC/HAP Emissions Sources

* (U)nregulated: An unregulated emissions unit is an emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards. Such emissions units and/or activities are neither "regulated" nor "exempt."

** I = Inactive

- EU 005 in Sikorsky permit (Dust Collector DC-3-SIK) used to collect dust from wood shop and machine shop. Machine shop has been relocated and Dust Collector DC-3-SIK no longer used/decommissioned and demolished in 2009. Applicant requested removal of this EU.
- EU 010 in Sikorsky Permit (Spray Booth (PS-13-SIK)) was removed, since the applicant requests removal of this EU (PS-13-SIK), as the booth has been decommissioned.

SECTION II. FACILITY-WIDE GENERAL CONDITIONS

REGULATORY CLASSIFICATION

Title III: The facility is not a major source of hazardous air pollutants (HAPs).

Title IV: The facility will not operate units subject to the acid rain provisions of the Clean Air Act.

Title V: The facility **is a** Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.

PSD: The permittee **is a** PSD facility in accordance with Rule 62-212.400, F.A.C.

RACT: Some of the emission units at the facility are subject to the RACT Rule**s.**

NSPS: This facility is not subject to 40 CFR 60 requirements

NESHAP: The facility is subject to the requirements of 40 CFR 61, Subpart M, Asbestos. In addition, the emergency generators are subject to **40 CFR Part 63 Subpart ZZZZ** "National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines." The painting and stripping operations are subject to the requirements of **40 CFR Part 63 Subpart HHHHHH**, "National Emission Standard for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources." The alodine tank is subject to the requirements of **40 CFR Part 63 Subpart WWWWWW**, "National Emission Standard for Hazardous Air Pollutants for Plating and Polishing Operations at Area Sources."

Pratt & Whitney (P&W) was at one time subject to the 40 CFR Part 63- Subpart GG (Aerospace MACT). Emission units that were subject to Subpart GG have been removed from the facility or transferred to other operations outside the West Palm Beach facility.

PERMIT CONTENT

Section I: Summary Information

Section II: Facility-Wide Specific Conditions

Section III: Emissions Unit Specific Conditions

Appendices

Appendix A:	General Permit Conditions
Appendix B:	Abbreviations, Acronyms, Citations, and Identification Numbers (Version dated 02/05/97)
Appendix C:	Summary of Testing Requirements
Appendix ZZZZ:	Applicable Requirements from 40 CFR Part 63 Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines
Appendix WWWWWW:	National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations
Appendix HHHHHH	National Emission Standard for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

SECTION II. FACILITY-WIDE GENERAL CONDITIONS

1.0 Administrative Requirements

1.1 Regulating Agencies: All applications, reports, tests, and notifications shall be submitted to the Air Pollution Control Section of the Palm Beach County Health Department (Health Department) at P.O. Box 29 (800 Evernia Street), West Palm Beach, Florida, 33402-0029, and telephone number (561) 837-5900. In addition, *copies* shall be submitted to the Air Program, Southeast District Office, Florida Department of Environmental Protection (DEP) at 400 North Congress Avenue, Suite 200, West Palm Beach, Florida, 33401. **[Specific Operating Agreement]**

1.2 General Conditions: The permittee shall be aware of, and operate under the attached General Conditions listed in *Appendix A* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. **[Rule 62-4.160, F.A.C.]**

1.3 Citation Format: *Appendix B* of this permit provides the format for citing applicable regulations.

1.4 Application for a Title V Operation Permit: A facility that commences operations as a Title V source after October 25, 1995, or that otherwise becomes subject to the permitting requirements of Chapter 62-213, F.A.C., after October 25, 1995, must file an application for an operations permit at least ninety days before the expiration of the source's air construction permit, but no later than 180 days after commencing operation, unless a different application due date is provided at Rule 62-204.800, F.A.C., or an earlier date is provided in the air construction permit. **[Rule 62-213.420(1)(a) 2, F.A.C.]**

Any applicant for a Title V permit, permit revision or permit renewal must submit an application form number 62-210.900(1), which must include all the information specified by subsection 62-213.420 (3) F.A.C., except that an application for permit revision must contain only the information related to the proposed change(s) from the currently effective Title V permit and any other requirements that become applicable at the time of the application. The applicant shall include information concerning fugitive emissions and stack emissions in the application. Each application for permit, permit revision, or permit renewal shall be certified by the responsible official in accordance with subsection 62-213.420(4), F.A.C. **[Rule 62-213.420(1)(b) 1, F.A.C.]**

{Permitting Note: The facility submitted a concurrent Title V permit application}

1.5 Applicable Regulations: This facility is subject to the following regulations: Florida Administrative Code Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. **[Rule 62-210.300, F.A.C. and the SOA]**

1.6 Source Obligation:

(a) Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the PBCHD in the permit.

(b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of Rules 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification. **[Rule 62-212.400(12), F.A.C.]**

SECTION II. FACILITY-WIDE GENERAL CONDITIONS

2.0 EMISSION LIMITING STANDARDS

2.1 **Emissions of Hazardous Air Pollutants (HAPs): The facility-wide emissions of a single HAP are limited to 9.9 tons in any consecutive 365-day period (rolling total). The facility-wide emissions of total HAPs are limited to 24.9 tons in any consecutive 365-day period (rolling total). The permittee shall monitor the emissions of HAPs pursuant to the condition 6.1 of this Section.**
[Applicant's request to become a synthetic minor facility for HAPs, Rule 62-4.070(3), F.A.C.]

2.2 General Particulate Emission Limiting Standards: General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, the permittee shall not:

(a) Cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as No. 1 on the Ringelmann Chart (20 percent opacity). **[Rule 62-296.320(4)(b)1., F.A.C.]**

(b) If the presence of uncombined water is the only reason for failure to meet the visible emissions standards given in Rule 62-296.320(4)1, F.A.C., such failure shall not be a violation of the rule. **[Rule 62-296.320(4)(b)3, F.A.C.]**

(c) All visible emissions test performed pursuant to the requirements of Rule 62-296.320(b)(4)1, F.A.C. shall use EPA Reference Method 9, and shall meet all applicable requirements of Chapter 62-297, F.A.C. **[Rule 62-296.320(4)(b)1, F.A.C.]**

2.3 Prevention of Accidental Releases (Section 112(r) of CAA): At such time as the requirements of 40 CFR Part 68 are applicable to this source, the permittee shall: [**Section 112(r)(7)(B)(iii) of the CAA, 40 CFR Part 68, Section 252.941(1)(c), F.S.]**

(a) Submit a Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office RMP Reporting Center.

(b) Report to the appropriate representative of the Department of Community Affairs, as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the permittee is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the Clean Air Act (CAA).

(c) Submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S. and Rule 9G-21, F.A.C.

Note: Currently the only substance stored at this facility in substantial quantities is distillate fuel and hydrogen fuel. However, neither distillate fuel nor its components are among the regulated substances listed in Section (r)(b) of CAA (40 CFR 68.130). Hydrogen when used as a fuel is also not among regulated substances. Based on this information provided by the permittee, the requirements of 40 CFR Part 68 are not applicable to this facility.

2.4 Objectionable Odors: Objectionable Odor Prohibited: The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. **[Rule 62-296.320(2), F.A.C.]**

Note: An objectionable odor is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. ***[Rule 62-210.200(187), F.A.C.]***

2.5 General VOC Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions: The permittee shall allow no person to store, pump, handle, process, load, unload, or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. **[Rule 62-296.320(1)(a), F.A.C.]**

2.6 Unconfined Particulate Emission Limiting Standards: Unconfined Emissions of Particulate Matter: The permittee shall not cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity,

including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions shall include the following:

(a) Paving and maintenance of roads, parking areas and yards.
(b) Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
(c) Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
(d) Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
(e) Landscaping or planting of vegetation.
(f) Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
(g) Confining abrasive blasting where possible.
(h) Enclosure or covering of conveyor systems.

[Rule 62-296.320(4)(c), F.A.C.]

2.7 **40 CFR Part 63 Subpart HHHHHH**: The operation of those emissions units that are subject to 40 CFR 63 Subpart HHHHHH "*National Emission Standard for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources*" shall comply with the conditions specified in Appendix HHHHHH. **[40 CFR 63 Subpart HHHHHH]**

3.0 PERFORMANCE STANDARDS

3.1 Circumvention: The permittee shall not circumvent air pollution control equipment/methods or allow the emission of air pollutants without the equipment/methods operating properly. **[Rule 62-210.650, F.A.C.]**

3.2 Excess Emissions Requirements**:**

(a) Excess emissions resulting from start-up, shutdown or malfunction of these emissions units shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24 hour period unless specifically authorized by the Health Department for longer duration. **[Rule 62-210.700(1), F.A.C.]**

(b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up, shutdown, or malfunction are prohibited. **[Rule 62-210.700(4), F.A.C.]**

(c) In case of excess emissions resulting from malfunctions, the permittee shall notify the Air Pollution Control Section of the Palm Beach County Health Department within one working day of: the nature, extent, and duration of the excess emissions; the cause of the problem; and the corrective actions being taken to prevent recurrence. **[Rule 62-210.700(6), F.A.C.]**

(d) Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust the maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest. **[Rule 62-210.700(5), F.A.C.]**

SECTION II. FACILITY-WIDE GENERAL CONDITIONS

4.0 COMPLIANCE MONITORING REQUIREMENTS

4.1 Duration: Unless otherwise specified in this permit, all records and reports required by this permit shall be kept for at least 3 years from the date the information was recorded. **[Rule 62-4.160(14)(b), F.A.C.]**

4.2 Test Procedures: All test methods and procedures shall be performed in accordance with the applicable requirements of Chapter 62-297, F.A.C., summarized in *Appendix C* of this permit. **[Rule 62-297.100, F.A.C.]**

4.3 Operational Rate During Testing: Unless otherwise stated in the applicable emission limiting standard for a rule, testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. **[Rule 62-297.310(2), F.A.C.]**

4.4 Stack Testing Facilities: The permittee shall install and maintain permanent / temporary stack testing facilities in accordance with the requirements provided in *Appendix C* of this permit. **[Rule 62-297.310(6), F.A.C.]**

4.5 Test Notification: At least 15 days prior to the date on which each formal compliance test is to begin, the permittee shall notify the Health Department in writing of: the test date; the expected test time; the location of the test; the facility contact person responsible for coordinating the test; and the person or company conducting test. The 15 day notification requirement may be waived at the discretion of the Health Department. Likewise, if circumstances prevent testing during the 60-day test window specified for the emissions unit, the owner or operator may request an alternate test date before the expiration of this window. **[Rule 62-297.310(7)(a)9., F.A.C.]**

4.6 Special Compliance Tests**:** When the Health Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a DEP rule or permit is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Health Department. **[Rule 62-297.310(7)(b), F.A.C.]**

5.0 REPORTS REQUIRED

5.1 Annual Operations Report: The annual operating report *[DEP Form No. 62-210.900(5)* shall be submitted to the Palm Beach County Health Department by April 1. If the report is submitted, using the Department's electronic annual operating report software (EAOR), there is no requirement to submit a copy to DEP or the Palm Beach County Health Department. **[Rule 62-210.370(3)(c), F.A.C.]**

5.2 Excess Emissions Report: If excess emissions occur, the Health Department may request a written summary report of the incident. **[Rules 62-4.130 and 62-210.700(6), F.A.C.]**

5.3 Emission Compliance Stack Test Reports: For each required emissions compliance test, a report indicating the results of the test shall be filed with the Health Department as soon as practical, but no later than 45 days after the last sampling run is completed. The report shall provide sufficient detail on the tested emissions unit and the procedures used to allow the Health Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in **Rule 62-297.310(8)(c), F.A.C.** and summarized in *Appendix C* of this permit. Additional report information may be specified for a given group of emissions units in this permit. **[Rule 62-297.310(8), F.A.C.]**

SECTION II. FACILITY-WIDE GENERAL CONDITIONS

6.0 EMISSIONS MONITORING REQUIREMENTS FOR HAPS EMISSIONS

6.1 Annual HAP Emissions – Recordkeeping: The permittee shall monitor compliance with the HAPs emissions limits, specified in condition 2.1 of this section, on a monthly basis. If the facility-wide rolling 12-month total emissions do not exceed 80% of the HAPs emission limits as specified, the permittee shall continue to monitor facility-wide HAPs emissions on a monthly basis (rolling 12-month total). If the facility-wide rolling 12-month total emissions of HAPS exceed 80% of the HAPs emissions limits as specified, the permittee shall monitor facility-wide HAPs emissions on a daily basis (rolling 365-day total). When the facility-wide rolling 365-day total emissions of HAPs do not exceed 80% of the specified HAPS emissions limits for 30 consecutive days, then monthly monitoring of HAPs emissions can be resumed.

The permittee shall maintain and record the following information.

a. The individual and total HAP fraction for each solvent/coating material that contains or emits HAPs. If the HAP content is provided by the material supplier or manufacturer as a range, then the permittee must use the upper limit of the range for determining compliance.

b. The solvent utilization on a monthly basis for all solvents that contain or emit HAPs.

c. The individual and total monthly HAP emissions for each material, calculated from the monthly material utilization and the individual and total HAP fraction, calculated for the preceding month no later than 20 days after the end of that month.

d. For fuel burning units, the monthly emissions of individual HAP and total HAPs shall be estimated based on the monthly fuel usage; and the emissions factor provided by the manufacturer or AP-42 "*Compilation of Air Pollutant Emission Factors*."

e. Using the monthly totals computed in subsection (d) above, rolling consecutive 12-month total emissions for individual and total HAPs for the entire facility shall be calculated for the previous twelve calendar months.

[Rule 62-4.070(3), F.A.C.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

SUBSECTION A. This subsection of the permit addresses the following unregulated emissions units:

EU No	R / U*	BRIEF DESCRIPTION
009	U	**Miscellaneous diesel storage tanks** located throughout the facility, including SAC diesel storage tanks: SCC #4-03-010-19: diesel, breathing loss; SCC #4-03-010-21: diesel, working loss *{Permitting Note: The total storage capacity for this group of tanks is 14,685 gallons.}* (DL-1AFP): 540 gallon diesel tank (DL-1- MFP): 250 gallon diesel tank (DL-1- MMG): 150 gallon diesel tank (DL-5-SIKTFP): 250 gallon diesel tank (DL-7-CFP): 350 gallon diesel tank (DL-8-ESFP): 550 gallon diesel tank (DL-10-ENFP): 1000 gallon diesel tank (DL-16-C11FP): 250 gallon diesel tank (DL-18-C14FP): 300 gallon diesel tank (DL-22-RTF): 350 gallon diesel tank (DL-21-C14G): 50 gallon diesel tank (DL-2-MMG): 1000 gallon diesel tank (DL-13-MHT): 2500 gallon diesel tank (DL-23-TAB): 5000 gallon diesel tank (DL-1-TABG): 50 gallon diesel tank (DL-1-RSG): 50 gallon diesel tank (DL-24-RTFG): 1000 gallon diesel tank (DL-1-PH1SIK): 150 gallon diesel tank (DL-1-PH2SIK): 150 gallon diesel tank (DL-2-PH2SIK): 150 gallon diesel tank (DL-1-PSTBSIK): 150 gallon diesel tank (DL-2-PSTBSIK): 150 gallon diesel tank (DL-1-B3ASIK): 295 gallon diesel tank
010	U	Miscellaneous jet fuel storage tanks located throughout the facility, including: SCC #4-03-010-16: jet fuel, standing loss; SCC #4-03-010-18: jet fuel, withdrawal loss *{Permitting Note: The total storage capacity for this group of tanks is 2,232,825 gallons. SAC does not have any stationary jet fuel tanks.}* (F-1-CFF): 1,000,000 gallon jet fuel tank (F-3-CFF): 150,000 gallon jet fuel tank (F-5-CFF): 1,000,000 gallon jet fuel tank (F-7-A): 10,000 gallon salvage jet fuel tank (F-17-B2): 7,000 gallon jet fuel tank (F-45-A1): 10,000 gallon jet fuel tank (F-35E-BO): 8,000 gallon jet fuel tank (F-37-C11): 275 gallon jet fuel tank (F-39-C14): 275 gallon jet fuel tank (F-40-C12): 275 gallon jet fuel tank (F-41-D): 8,000 gallon jet fuel tank (F-42-B): 10,000 gallon jet fuel tank (F-43-B): 10,000 gallon jet fuel tank (F-44-B): 8,000 gallon jet fuel tank (F-46-B): 1,000 gallon jet fuel tank (F-28-R): 10,000 gallon jet fuel tank
012	U	One million gallon jet fuel, floating roof storage tank (F-8-CFF) located in the Test Area fuel farm; constructed during 1986 and exempt from NSPS Kb due to vapor pressure criteria (Floating Roof Tank) SCC #4-03-011-13: jet fuel, standing loss; SCC #4-03-001-19: jet fuel, Working loss

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

EU No	R / U*	Brief Description
015	U	Closed-loop halogenated flush cleaning process (BF-1-RL-10) using Vertrel MCA. Located in the RL-10 /SSME Rocket Assembly Area consisting of back flushing of rocket engines located in Manufacture Area using Vertrel MCA Solvent 4-01-002-95: Gallons used *{Permitting Note: Although these cleaning processes use trichloroethylene, a halogenated solvent and regulated volatile organic compound, they are completely closed loop systems. Therefore, the units are not subject to the requirements of the NESHAP, Subpart T, which regulates halogenated solvent cleaners. Because these activities relate to the components of space vehicles, they are not covered by NESHAP, Subpart GG, regulating aerospace manufacturing and rework. In addition, these activities are exempt from the requirements of VOC RACT for degreasers [Rule 62-296.511, F.A.C.] because the combined emissions do not exceed 3 pounds per hour nor more than 15 pounds per day in accordance with Rule 62-296,500(3)(a), F.A.C. The Health Department determines this emissions unit "unregulated".}* *A process change completed in November 2002 has eliminated the use of trichloroethylene plant-wide. A Subpart T non-regulated solvent, Vertrel MCA, is used instead. Currently, no activities subject to NESHAP, Subpart T remain at the facility.*
018	U	Acid gas scrubbing system (AS-2-MPL) for Nickel and Silver plating operations located in the Manufacture Area. With an estimated scrubbing efficiency of 98%; Ceilcote Model #VCP-78 3-01-888-01: tons of product used
031	U	Two 20,000 gallon, above ground, fixed roof, diesel storage tanks (DL-19-SEGF and DL-20-SEGF) located in the Test Area near the FPL "Pratt Whitney" substation; constructed during 1989 and exempt from NSPS. SCC #4-03-010-19: diesel, breathing loss; SCC #4-03-010-21: diesel, working loss
037	U	Tank (GA-1R-TAB): 5,000 gallon gasoline; exempt from NSPS SCC #4-04-002-02: gasoline (RVP-10), breathing loss; SCC #4-04-002-05: gasoline (RVP-10), working loss
040	U	Two heat treatment furnaces (FU-3-MHT and FU-4-MHT), each with a heat input rate of 6 mmBTU / hour located in the Manufacture Area; both are Sunbeam box-type furnaces and burn natural gas only. SCC #1-02-006-02: natural gas combustion, 10 - 100 mmBTU per hour
045	U	Water evaporator (EV-1-MW) with a heat input rate of 0.2 mmBTU/hour located in the Waste Management Area; SAMSCO Model # 2C820, burns natural gas only. SCC #1-02-006-03: natural gas combustion, < 10 mmBTU per hour
049	U	Plasma Spray Booths. These spray booths are used to coat rocket engine parts with a metal and/or ceramic coating. Process does not use organic coatings. SCC # 3-09-040-01: tons of sprayed metal; SCC # 3-09-060-99: tons of material processed

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

<table>
<tr><th>EU No</th><th>R / U*</th><th>Brief Description</th></tr>
<tr><td>059</td><td>U</td><td>Miscellaneous fuel and air heaters located in the different Test Areas.
These heaters are used to heat JP-8 fuel and/or air for testing jet engine components, and are fired with natural gas only.

SCC #3-90-006-99: natural gas combustion

Air heater (HR-22-D1) with a design heat input rate of 7 mmBTU per hour, Test Area D
Air heater (HR-23-D3) with a design heat input rate of 4 mmBTU per hour, Test Area D
Air heater (HR-26-D4) with a design heat input rate of 4 mmBTU per hour, Test Area D
Air heater (HR-27-D5) with a design heat input rate of 4 mmBTU per hour, Test Area D
Air heater (HR-28-D7) with a design heat input rate of 6 mmBTU per hour, Test Area D
Air heater (HR-29-A4) with a design heat input rate of 7 mmBTU per hour, Test Area A
Air heater (HR-17-D2) with a design heat input rate of 15 mmBTU per hour, Test Area D
Fuel heater (HR-1-A9) with a design heat input rate of 16 mmBTU per hour, Test Area A</td></tr>
<tr><td>065</td><td>U</td><td>Diesel engines at P&W, and SAC, powering emergency equipment including fire protection pumps, backup generators and cooling water pumps during rocket engine testing.

SCC # 2-04-004-02: Thousand gallons of diesel fuel

Equipment listed below:

<table>
<tr><th>Equipment</th><th>Location</th><th>Equipment No</th><th>Diesel Tank ID</th></tr>
<tr><td>Fire Pump</td><td>EOB Lake</td><td>C038806</td><td>DL-1-MFP</td></tr>
<tr><td>Fire Pump</td><td>C11</td><td>CO47146</td><td>DL-16-C11FP</td></tr>
<tr><td>Fire Pump</td><td>C12/14</td><td>CO49074</td><td>DL-18-C14FP</td></tr>
<tr><td>Fire Pump</td><td>A4</td><td>CO43466</td><td>DL-1-AFP</td></tr>
<tr><td>Fire Pump</td><td>C10</td><td>CO51454</td><td>DL-7-CFP</td></tr>
<tr><td>Fire Pump</td><td>E Area North</td><td>CO52350</td><td>DL-10-ENFP</td></tr>
<tr><td>Fire Pump</td><td>E Area South</td><td>CO51279</td><td>DL-8-ESFP</td></tr>
<tr><td>Fire Pump</td><td>Remote Test Facility</td><td>CO50190</td><td>DL-22-RTF</td></tr>
<tr><td>Generator</td><td>Heat Treat</td><td>CO39024</td><td>DL-13-MHT</td></tr>
<tr><td>Generator</td><td>K-17</td><td>CO42502</td><td>DL-2-MMG</td></tr>
<tr><td>Generator</td><td>Maintenance</td><td>CO51880</td><td>DL-1-MMG</td></tr>
<tr><td>Generator</td><td>C Area Training</td><td>CO46467</td><td>DL-21-C14G</td></tr>
<tr><td>Generator</td><td>Building TAB Generator</td><td>CO40336</td><td>DL-1-TABG</td></tr>
<tr><td>Generator</td><td>Rocket Support</td><td>CO46466</td><td>DL-1-RSG</td></tr>
<tr><td>Generator</td><td>Remote Test Facility</td><td>CO56179</td><td>DL-24-RTFG</td></tr>
<tr><td>Fire Pump</td><td>Pump House 1 – SAC</td><td>8VA354125</td><td>DL-1-PH1SIK</td></tr>
<tr><td>Fire Pump</td><td>Pump House 2 – SAC</td><td>6A-432657</td><td>DL-1-PH2SIK</td></tr>
<tr><td>Fire Pump</td><td>Pump House 2 – SAC</td><td>6A-433001</td><td>DL-2-PH2SIK</td></tr>
<tr><td>Fire Pump</td><td>PTSB1 – SAC</td><td>03Z12944</td><td>DL-1-PSTBSIK</td></tr>
<tr><td>Fire Pump</td><td>PTSB2 – SAC</td><td>PE6068H237993</td><td>DL-2-PSTBSIK</td></tr>
<tr><td>Generator</td><td>Building 3A</td><td>483504</td><td>DL-1-B3ASIK</td></tr>
</table>
</td></tr>
</table>

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

EU No	R / U*	BRIEF DESCRIPTION
069	U	10 existing jet engine test stands, consisting of: 6 stands for testing military aircraft engines located at the west end plant site of Test Area A (A-03, A-04, A-05, A-08, A-09, and A-10) 4 stands for testing commercial aircraft engines located at the west end plant site of Test Area C (C-10, C-11, C-12, and C-14) The stands are estimated to operate approximately 10,000 engine hours and consume approximately 12 million gallons of jet fuel. SCC # 2-02-009-01: 1000 gallons of jet fuel burned *{Permitting Note: The jet engine test stands were constructed prior to the PSD baseline date. In the early 1970s, several test stands were issued air pollution "operation" permits, which described the stands and estimated emissions, but did not limit operation. In a January 16, 1980 letter, the Department of Environmental Regulation made the following determination for the existing jet engine test stands:* *The Department would not require air pollution permits for the individual test stands nor the relocatable jet engines. The Department would not specify conditions in other permits that would affect the scheduling or utilization of individual test stands or relocatable jet engines. The Department would require Pratt & Whitney to report jet fuel consumption on a facility-wide basis. The main concern at this time was reporting an accurate emissions inventory for the purpose of tracking "reasonable further progress" towards attainment of the ozone standard.* *However, recent guidance from the EPA (listed below) indicates that jet engine test stands are considered to be stationary sources of air pollution.* *12-31-95: EPA-AEB to Georgia Department of Natural Resources: Aerospace Ground Equipment, Hush Houses, and Jet Engine Test Cells* *03-12-96: EPA-AEB to Georgia Department of Natural Resources: Aerospace Ground Equipment, Hush Houses, and Jet Engine Test Cells* *09-23-96: EPA-APT to Mr. John R. McDowell, PE: Title V Applicability Issues Related to the Cincinnati/Northern Kentucky International Airport* *Therefore, the Health Department establishes the jet engine test stands as existing, "unregulated" stationary emissions units with no limits on operation.}*
070	U	Aerospace hand-wiping operations: This emission unit was engaged in manufacturing of military jet engines, and hence was subject to 40 CFR 63 Subpart GG "National Emission Standards for Aerospace Manufacturing and Rework Facilities." However, Jet engine manufacturing ceased in 2000 after the transfer of those operations and associated equipment to Connecticut. The current operations are exempt from Subpart GG based on 40 CFR 63.741(f) & (h). If the facility re-engages in jet engine activities, then the facility shall apply and obtain a permit revision prior to the start-up of such activities. SCC # 4-01-003-98: gallons of solvent consumed

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

EU No	R / U*	Brief Description
071	U	Aerospace spray gun cleaning operations subject to NESHAP Subpart GG This emission unit was engaged in manufacturing of military jet engines, and hence was subject to 40 CFR 63 Subpart GG "National Emission Standards for Aerospace Manufacturing and Rework Facilities." However, Jet engine manufacturing ceased in 2000 after the transfer of those operations and associated equipment to Connecticut. The current operations are exempt from Subpart GG based on 40 CFR 63.741(f) & (h). If the facility re-engages in jet engine activities, then the facility shall apply and obtain a permit revision prior to the start-up of such activities. SCC # 4-02-999-98: gallons of solvent consumed
072	U	Aerospace flush cleaning operations This emission unit was engaged in manufacturing of military jet engines, and hence was subject to 40 CFR 63 Subpart GG "National Emission Standards for Aerospace Manufacturing and Rework Facilities." However, Jet engine manufacturing ceased in 2000 after the transfer of those operations and associated equipment to Connecticut. The current operations are exempt from Subpart GG based on 40 CFR 63.741(f) & (h). If the facility re-engages in jet engine activities, then the facility shall apply and obtain a permit revision prior to the start-up of such activities. SCC # 4-01-003-98: gallons of solvent consumed
073	U	Aerospace primer and topcoat applications (paint booth PS-4-MM is currently out-of-service but is not demolished and was used for support equipment and not for any aircraft part only or products. This emission unit was engaged in manufacturing of military jet engines, and hence was subject to 40 CFR 63 Subpart GG "National Emission Standards for Aerospace Manufacturing and Rework Facilities." However, Jet engine manufacturing ceased in 2000 after the transfer of those operations and associated equipment to Connecticut. The current operations are exempt from Subpart GG based on 40 CFR 63.741(f) & (h). If the facility re-engages in jet engine activities, then the facility shall apply and obtain a permit revision prior to the start-up of such activities. SCC # 4-02-001-10: gallons used
074	U	Aerospace waste storage and handling operations subject to NESHAP, Subpart GG – Currently operating under a RCRA permit, therefore, exempt from Subpart 40 CFR 63 Subpart GG, based on 40 CFR 63.741(e). SCC # 5-03-008-30: 1000 each-year containers used
085	U	Miscellaneous VOC/HAP Emissions Sources

Air Pollution Control Equipment

A.1 Controls: The permittee shall install, operate, and maintain any existing air pollution control equipment in accordance with the manufacturer's instructions and recommendations. The air pollution control equipment shall be on line and functioning properly when operating the emissions units generating activity.
[Rules 62-210.650, F.A.C.]

Performance Standards

A.2 **Emission Units #70, #71, #72, and #73**: If the facility re-engages in jet engine activities, then the facility shall apply and obtain a permit revision prior to the start-up of such activities.
[62-4.070(3), F.A.C.]

A.3 Hours of Operation: The hours of operation of these emissions units are not limited (8760 hours per year).
[Rules 62-4.160(2) and 62-210.200 (Def. of PTE), F.A.C. and Applicant Request]

A.4 Allowable Fuels: Fuel combustion is limited to only those fuels listed in the above description of each emissions unit.
[Rules 62-4.160(2) and 62-210.200 (Def. of PTE), F.A.C. and Applicant Request]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

COMPLIANCE MONITORING REQUIREMENTS

A.5 Records: The permittee shall be able to track the actual activity level for each emissions unit, reportable on an annual basis in accordance with the Annual Operating Report, DEP Form No. 62-210.900(5), F.A.C. Activities include fuel combustion (including test stands), fuel throughput, raw material usage, etc.
[Rule 62-210.370(3), F.A.C.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

SUBSECTION B: *This subsection addresses the following emissions units:*

EU No.	R / U*	BRIEF DESCRIPTION
014	R	Paint spray booth (PS-1-TMC) Located in open hanger with no forced exhaust or filtration located in the rocket support Test Area E; used to *refinish* metal parts of support equipment SCC #4-02-001-10: Gallons of Coating
064	R	Paint spray booth (PSB-1-RTF) with panel filter located in the Remote Test Facility; Binks Model # CA-528-T-LH, and it is used to *refinish* metal parts of support equipment or to coat prototype, non-production parts. Stack details: Height 46', exit diameter 3', and 16,400 ACFM. SCC #4-02-001-10: tons of solvent

{Permitting Note: Because these emissions units are not directly related to aerospace vehicles or components, they are not covered by the NESHAP, Subpart GG, which regulates aerospace manufacturing and rework activities. Because they are only used to refinish metal components of support equipment, they are not subject to the VOC RACT Rule 62-296.513, F.A.C.

EU # 14: The potential emissions of HAPs are 2.51 tons per year. EU # 64: The potential emissions of HAPs are 4.57 tons per year.}

AIR POLLUTION CONTROL EQUIPMENT AND METHODS

B.1 Particulate Control: Particulate matter emissions from paint overspray shall be controlled by:

(a) *EU 014 (PS-1-TMC)*: Confining painting to spray booth located in large, enclosed hanger. Hanger door may be open for ventilation as long as particulate matter emissions remain confined.

(b) *EU 064 (PSB-1-RTF)*: Forced exhaust from each spray booth through mat or panel filters.
[Rule 62-4.070(1), F.A.C.]

EMISSION LIMITING AND PERFORMANCE STANDARDS

B.2 Operational Restrictions:

(a) The hours of operation for these emissions units are not limited (8760 hours per year).
[Rule 62-210.200 (PTE), F.A.C. and Applicant Request]

(b) *VOC Emissions:* Emissions of volatile organic compounds (VOC) from the spray booths shall not exceed:

(1) *EU 014 (PS-1-TMC)*: 11.50 tons per consecutive 12 months, rolling total.
[Rule 62-210.200 (PTE), F.A.C. and Applicant Request]

(2) *EU 064 (PSB-1-RTF)*: 2.84 tons per consecutive 12 months, rolling total.
[Rule 62-296.500(3)(b), F.A.C. and Permit No. AC-50-168734]

(c) Emissions of Hazardous Air Pollutants (HAPs) are subject to the Facility-wide condition # 2.1.
[Applicant's Request]

COMPLIANCE MONITORING REQUIREMENTS

B.3 VOC Content: The volatile organic compound (VOC) and Hazardous Air Pollutant (HAP) content of all coatings, thinners, and cleaners shall be determined by the Manufacturer Safety Data Sheets (MSDS), or EPA Method 24, or EPA 450/3-84-019, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rule 62-4.070(3), F.A.C.]

B.4 Daily Spray Log: For each day of operation, the permittee shall record the following information in a written log, or an equivalent electronic recordkeeping system, provided records can be generated when requested by the Health Department:

(a) Date of operation;
(b) Identification of each VOC/HAP-containing material used (i.e., paints, thinners, cleaners, resins, adhesives, etc.); and
(c) Quantity of each VOC/HAP-containing material used to nearest tenth of a gallon.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

[Rule 62-4.070(3), F.A.C.]

B.5 Monthly Operations Log: The permittee shall demonstrate compliance with the VOC/HAP limits on a monthly basis by keeping a written log, or an equivalent electronic recordkeeping system, provided records can be generated when requested by the Health Department, of the operations. Prior to the 20th calendar day of each month, the permittee shall calculate and record the following information for the previous month of operation:

(a) Month of operation.

(b) Type and quantity of each VOC/HAP-containing material used during the previous month.

(c) Calculated emissions of VOC/HAP for the previous month and for the previous consecutive 12 months, rolling total. Calculations are to assume that 100% of the solvents in the coatings, thinners, and cleaners used will evaporate into the atmosphere and shall be consistent with the following generic equation:

$$E^M = \sum(U^M \times D \times C)$$

Where:

E^M = Calculated VOC/HAP emissions for a given month reported to the nearest hundredth of a ton

$\sum$ = Sum of the products of the coatings, thinners, and cleaners

U^M = Usage of coating, thinner, or cleaner for a given month reported from the daily spray log

D = Density of coating, thinner, or cleaner reported from MSDS

C = VOC/HAP content of coating, thinner, or cleaner reported from MSDS

The actual equations and calculations are left to the discretion of the permittee, but they must meet the basic intent of the calculation described above. For example, calculation and summary by a computer spreadsheet or database is acceptable as long as the calculations are consistent with the methodology specified in this section.
[Rule 62-4.070(3), F.A.C.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection C: *This subsection addresses the following emissions units:*

EU No.	R / U*	Brief Description
016	R	Boiler (BO-12-E6) with a heat input rate of 42 mmBTU per hour located in Test Area E Scotch Marine Model# 100 HP. Stack details: Height 15', exit diameter 2.5', with 6690 ACFM. SCC #1-02-006-02: natural gas, external combustion - 10-100 MMBtu/hr
022	R	Two boilers (BO-1-MBH, BO-2-MBH) each with a heat input rate of 54 mmBTU per hour located in the Manufacture Area Superior Model# 300-HSGL. Stack details: Height 66', exit diameter 7.6', with 91000 ACFM (Identical for two boilers) SCC #1-02-006-02: natural gas, external combustion - 10-100 MMBtu/hr
066	R	Boiler (BO-14-E8) with a heat input rate of 7 mmBTU per hour located in the Test Area E. 200 Hp Johnson Model No. PFTA 200-4P300-S, fired by propane only. Stack details: Height 24', exit diameter 1', with 2765 ACFM SCC #1-03-010-02: propane, external combustion

{Permitting Note: Thee boilers (EU 016 & 022) are not subject to 40 CFR 60 Subpart Dc "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units" since these boilers are constructed before June 9, 1989. EU 066 is not subject to Subpart Dc since its heat input is less than 10 MMBtu/hr.}

Emission Limiting and Performance Standards

C.1 Visible Emissions from any boiler shall not exceed 20 percent opacity except for one, two-minute period per hour, during which the opacity shall not exceed 40 percent.
[Rule 62-296.406(1), F.A.C.]

C.2 Particulate Matter and Sulfur Dioxide: Emissions of particulate matter and sulfur dioxide shall be controlled using the Best Available Control Technology (BACT). BACT for these boilers is firing only pipeline quality natural gas or commercial grade propane.
[Rule 62-296.406(2), F.A.C., Applicant Request]

C.3 Unrestricted Hours of Operation: The hours of operation for the boilers are not limited.
[Rules 62-4.160(2), 62-210.200 (Def. of PTE), F.A.C. and Applicant Request]

Compliance Monitoring Requirements

C.4 Fuel Use Records: In lieu of conducting annual visible emission observations, the permittee can demonstrate compliance with the visible emission standards by maintaining fuel use records that document the exclusive use of pipeline quality natural gas or commercial grade propane to fuel the specific emission unit during the previous federal fiscal year.
[Rules 62-297.310 and 62-297.350, F.A.C.]

Reports Required

C.5 Record Keeping requirements: The permittee shall be able to monitor and record the actual amount of fuel consumed and the operating hours on a monthly basis. All records shall be maintained on site at the facility. The annual amount of fuel consumed by these emission units shall be included in the Annual Operating Report (AOR), DEP Form N0.62-210.900(5), F.A.C.
[Rule 62-210.370, F.A.C.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection D: *This subsection addresses the following equipment as a single emissions unit:*

EU No.	R / U*	Brief Description
068	R	**8 emergency electrical generators located near Test Area B** This emission units consists of: • 16 identical diesel engines, Detroit Diesel Model #32V-149-TIB-3200; • Each engine consumes approximately 109.2 gallons of diesel fuel per hour; and • A pair of engines powers a single generator for emergency electrical power demands. • Stack Details: Height 12', exit diameter 0.8', and 14,980 ACFM volumetric flow rate. SCC #2-03-001-01: Internal combustion, diesel fuel

{Permitting Note: In a letter dated August 10, 1989, the Department of Environmental Regulation (now DEP) exempted the emergency generators from the requirement to obtain an air permit based on Rule 17-2.210(3)(t), F.A.C. which exempted all diesel emergency generators. Later this rule was revised [Rule 62-210.300, F.A.C.] to exempt only those diesel emergency generators that operated less than 400 hours per year. Therefore, the units remained exempt from air permitting requirements. Subsequently, the Department developed major source NOx RACT regulations [Rule 62-296.570, F.A.C.] which included a NOx RACT emission limiting standard for "oil-fired diesel generating units". Although this facility was major for NOx, the applicability portion of the rule [Rule 62-296.570(1)(b), F.A.C.] stated that requirements did not apply to emissions units that are exempt in accordance with Rule 62-210.300, F.A.C. Finally, the Department revised Rule 62-210.300(3)(a)20., F.A.C. to exempt only those diesel generators consuming less than 32,000 gallons of diesel fuel per year. In the initial Title V application, the applicant specifically requested a limit of less than 400 hours per year.}

Emission Limiting and Performance Standards

D.1 40 CFR 63 Subpart ZZZZ: These emission units are subject to the regulations of 40 CFR Part 63 Subpart ZZZZ "National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines."
[40 CFR 63 Subpart ZZZZ]

D.2 NOx RACT Limit: Emissions of nitrogen oxides (NOx) from any oil-fired diesel generator shall not exceed 4.75 pounds per million BTU. This emission limit shall apply at all times except during periods of startup, shutdown, or malfunction, as provided by Rule 62-210.700, F.A.C.
[Rule 62-296.570(4)(a)2., (b)7., and (c), F.A.C.]

D.3 Allowable Fuel: Fuel shall be limited to diesel containing no more than 0.05% sulfur by weight.
[Rules 62-4.160(2) and 62-210.200 (Def. of PTE), F.A.C.]

D.4 Hours of Operation: The permittee shall not operate any engine for more than 399 hours in any consecutive 12 months, rolling total. This permit must be modified prior to operation beyond this limit. Engines operating more than 400 hours per year shall be tested for nitrogen oxide emissions.
[Rules 62-4.160(2) and 62-210.200 (Def. of PTE), F.A.C. and Applicant Request]

Compliance Monitoring Requirements

D.5 Compliance Test Method: EPA Method 7 shall be used to determine compliance with the emission-limiting standard for nitrogen oxides. See *Appendix C* for applicable Test Methods and Procedures.
[Rule 62-296.570(4)(a)3., F.A.C.]

D.6 NOx Testing Frequency: The permittee shall conduct annual emission testing for each engine operating on oil for 400 hours or more during each federal fiscal year (October 1st to September 30th). Annual compliance testing while firing oil is unnecessary for units operating on oil for less than 400 hours in the current federal fiscal year.
[Rule 62-296.570(4)(a)3., F.A.C.]

Records

D.7 Fuel Records: The permittee shall record the actual amount of fuel throughput for this emission unit, reportable on an annual basis in the Annual Operating Report, DEP Form No. 62-210.900(5), F.A.C. Permittee shall maintain documentation that the fuel does not exceed 0.05% sulfur content. All records shall be maintained on site at the facility.
[Rule 62-210.370(3), F.A.C.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection E: *This subsection addresses the following emissions units:*

EU No.	R / U*	Brief Description
077	R	**Combustion Turbine Test Stands** Natural Gas firing at the combustion turbine test stands using wet, dry, and low-NOx technologies. SCC # 1-02-006-02: MMCF Natural gas burned

Emission Limiting and Performance Standards

E.1 Permitted Capacity: The permittee shall not allow, cause, suffer or permit the operation of the modified test stands in excess of the following capacities without prior authorization from the Permitting Authority:

(a) *Annual Natural Gas Usage*: The permittee is authorized to use a maximum of 992 million standard cubic feet of natural gas per year (12-month rolling total) based on the method of operation.

(b) *Maximum Natural Gas Usage*: The permittee is authorized to fire a maximum of 0.310 million standard cubic feet of natural gas per hour while conducting R&D and QA & QC activities.

[Permit No. 0990021-005-AC]

E.2 Hours of Operation: The permittee is authorized to operate the combustion turbine test stands continuously within the limits specified in this permit. **[Permit No. 0990021-005-AC]**

E.3 Modes/Methods of Operation: The permittee shall not allow, cause, suffer or permit any change in the method(s) of operation resulting in emissions in excess of limits specified in Specific **Condition III.E.4** of this permit without prior authorization from the Permitting Authority. The authorized modes and methods of operation include the following:

(a) *Research & Development Activities*: The permittee is authorized to conduct R&D activities related to the firing of natural gas in the combustion turbines using either wet, dry, or low-NOx control technologies.

(b) *QA/QC Activities*: The permittee is authorized to conduct QA/QC activities related to the firing of natural gas in the combustion turbines using either wet, dry, or low-NOx control technologies.

[Permit No. 0990021-005-AC]

{Permitting Note: Prior authorization includes the issuance of construction, reconstruction, or modification permits or a determination by the Permitting Authority that the action is not subject to Rule 62-210.300(1), F.A.C. The limits of this permit do not apply to fuel oil firing.}

Emission Limitations and Standards

E.4 Emission Limitations: The permittee shall not allow, cause, suffer or permit emissions in excess of the following limitations without prior authorization from the Permitting Authority:

(a) *Oxides of Nitrogen*: Emissions shall not exceed 39.9 tons per year (12-month rolling total).
(b) *Carbon Monoxide*: Emissions shall not exceed 99.9 tons per year (12-month rolling total).

[Permit No. 0990021-005-AC]

Compliance Monitoring Requirements

E.5 Emissions Inventory: The permittee shall maintain a current emissions inventory for each combustion turbine model tested. As a minimum, the emissions inventory shall be reviewed and revised semi-annually, as needed. The emissions inventory shall include the following information:

(a) Combustion Turbine Model No.
(b) Mode of Operation [R&D Activities or QA/QC Activities].
(c) Method of Operation [Wet, Dry, or Low NOx]
(d) Emissions data for NOx and CO based on load, water to fuel ratio (if applicable), ambient temperature, ambient pressure, and relative humidity.

[Permit No. 0990021-005-AC]

{Permitting note: When establishing the inventory, the permittee may use single worst-case emissions over the various loads for either a mode or method of operation. The complexity and detail of the inventory is at the option of the permittee provided sufficient background information is available for the Health Department to document the emissions inventory assumptions if required.}

E.6 Quality Assurance Plan (QAP): The permittee shall prepare a written QAP for the Emissions Inventory requirement of **Condition III.E.5** of this permit. The QAP shall, as a minimum, require periodic sampling and analysis of the exhaust gas temperature and concentrations of oxygen, NOx and CO. The QAP shall be implemented once actual NOx or CO emissions equal or exceed eighty (80) percent of the 12-month rolling totals of **Condition III.E.4** The permittee may elect to use a portable Combustion Gas Analyzer provided the unit is operated and maintained in accordance with the manufacturer's instructions or equivalent test method.
[Permit No. 0990021-005-AC]

E.7 Continuous Emissions Monitoring System (CEMS): The permittee may in-lieu of the emissions inventory and QAP requirements of **Conditions III.E.5** and **III.E.6**, elect to use a CEMS for monitoring and tracking emissions of NOx and CO. The CEMS system shall be installed, operated, and maintained in accordance with the performance specifications of 40 CFR 60 Appendices B and F as adopted in Rule 62-297.520, F.A.C.
[Permit No. 0990021-005-AC]

{Permitting note: The applicant is being required to maintain an emissions inventory to ensure that the facility does not exceed the major source thresholds for PSD. The Health Department's intent is that the permittee will maintain a sufficient inventory to document actual emissions on a monthly basis in accordance with the most recent emissions data. It is not the Health Department's intent to back-calculate annual emissions in the event new data are made available. However, the Health Department is requiring the permittee to use the most recent factors to calculate test emissions once any revised factors are made available and comply with the emission limits of this permit.}

RECORDKEEPING AND REPORTING

E.8 Operating Records: The permittee shall maintain the following records:

(a) Test Number (Assigned by P&W).
(b) Test Date (MM/DD/YY).
(c) Test Mode (R&D or QA/QC).
(d) Test Method (Wet, Dry, or Low-NOx).
(e) Ambient Conditions (Temperature, Pressure, and Relative Humidity) during each test.
(f) Test data examples include Load (%), Duration at each Load Point (min.), Water to Fuel ratio, and test duration.
(g) Emissions estimates for the Oxides of Nitrogen (NOx) and Carbon Monoxide (CO) in pounds per test based on the Emissions Inventory Data of **Condition III.E.5**
(h) Annual Emissions for NOx and CO based on a 12-month rolling total calculated by the 20th of each month.

[Permit No. 0990021-005-AC]

{Permitting Note: The permittee may elect to use an electronic recordkeeping system in the format of either a spreadsheet or database provided records can be generated when requested by the Health Department.}

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

Sub Section F: *This subsection addresses the following emissions units:*

EU No.	R / U*	BRIEF DESCRIPTION
078	R	**Vertrel Vapor Degreaser** This degreaser uses the Vertrel® MCA specialty fluid and was manufactured by Forward Tech Industries, Inc. SCC # 4-01-002-99: tons of solvent used

{Permitting Note: Vertrel proprietary solvents do not contain any HAPs and are not subject to 40 CFR 63 (NESHAP) Subpart T "National Emission Standards for Halogenated Solvent Cleaning"}

EMISSION LIMITING AND PERFORMANCE STANDARDS

F.1 Methods of Operation: The permittee shall not allow, cause, suffer or permit any change in the method of operation without prior authorization from the Permitting Authority. The authorized methods of operation include the following:

(a) *Open Top Area*: The vapor degreaser shall not have an open top area equal to or greater than 10.8 square feet (one square meter). **[Rule 62-296.511(1)(b)1., F.A.C., and Permit No. 0990021-005-AC]**

(b) *Degreasing Solvent*: The degreasing solvent shall not contain any halogenated solvent(s) regulated under 40 CFR part 63, Subpart T, any listed hazardous air pollutants regulated under Section 112 of the federal Clean Air Act as of November 1, 2001, or any listed ozone depleting compounds regulated under Title VI of the federal Clean Air Act as of November 1, 2001. **[Permit No. 0990021-005-AC]**

(c) *Solvent Usage:* Annual consumption of degreaser solvent shall not exceed 2,230 gallons per year. **[Permit No. 0990021-005-AC]**

F.2 Control Technology: The permittee shall not allow, cause, suffer or permit the operation of the unit without the following controls in-place and operating without prior authorization from the Permitting Authority. The control technologies include the following: **[Permit No. 0990021-005-AC, Rule 62-296.511(3), F.A.C.]**

(a) The vapor degreaser shall be equipped with a cover that can be opened and closed easily without disturbing the vapor zone.

(b) The vapor degreaser shall be equipped with the following safety switches:
- (1) A condenser flow switch and thermostat which shuts off the heat if the condenser coolant is either not circulating or too warm; and
- (2) A spray safety switch which shuts off the spray pump if the vapor level drops more than 4 inches (10 centimeters) below the bottom condenser coil; and
- (3) A vapor level control thermostat, which shuts off the heat when the vapor level rises to high.

(c) The cover shall be kept closed at all times except when processing work loads through the degreaser.

(d) Minimize solvent carryout by the following methods:
- (1) Racking parts to allow complete drainage; and
- (2) Moving parts in and out of the degreaser at less than 11 feet per minute (3.3 meters per minute); and
- (3) Holding the parts in the vapor zone at least 30 seconds or until condensation ceases; and
- (4) Decanting any pools of solvent on the cleaned parts before removal from the vapor zone; and
- (5) Allowing parts to dry within the degreaser for at least 15 seconds or until visually dry.

(e) Do not degrease porous or absorbent materials, such as cloth, leather, wood, or rope.

(f) Do not occupy more than half of the degreaser's open-top area with a workload.

(g) Do not load the degreaser to the point where the vapor level would drop more than 4 inches (10 centimeters) below the bottom condenser coil when the workload is removed from the vapor zone.

(h) Always spray below the vapor zone.

(i) Repair solvent leaks immediately, or shut down the degreaser.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

(j) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party such that greater than 20 percent of the waste solvent (by weight) can evaporate to the atmosphere.

(k) Do not operate the cleaner so as to allow water to be visually detectable in solvent exiting the water separator.

(l) Do not use ventilation fans near the degreaser opening, nor provide exhaust ventilation exceeding 66 cubic feet per minute per square foot (20 cubic meters per minute per square meter) of degreaser open area, unless necessary to meet OSHA requirements.

(m) Provide a permanent, conspicuous label, summarizing the operating procedure of **Conditions III.F.2.(c)** through **III.F.2.(l)** of this permit.

F.3 Hours of Operation: The permittee is authorized to operate continuously within the limits of this permit.
[Permit No. 0990021-005-AC]

COMPLIANCE MONITORING

F.4 Test Method: EPA Method 21 shall be use to determine volatile organic compound emissions from the vapor degreaser. **[Permit No. 0990021-005-AC, and Rule 62-296.511(5)(a), F.A.C.]**

F.5 Leak Detection and Repair Program: The permittee shall implement a leak detection and repair (LDR) program that includes a monthly inspection of the vapor degreaser in conjunction with the operating records of **Condition III.F.6.** The program shall as a minimum include the following:

(a) Visual Inspection of the degreaser and equipment area for signs of liquid leaks.

(b) Repair of any leak within 72 hours of detection.

(c) Test all repairs for leaks in accordance with **Condition III.F.4** of this permit.

[Permit No. 0990021-005-AC]

RECORD KEEPING REQUIREMENTS

F.6 Monthly Operating Records: The permittee shall maintain the following records for a period of 5 years either in electronic or written form:

(a) Date (Month, Day, & Year)
(b) Solvent Added to the Degreaser (Gallons)
(c) Solvent Removed from the Degreaser (Gallons)
(d) Net Gallons used for the period (Added-Removed)
(e) LDR Program Inspection Results
(f) LDR Program Repairs
(g) Volatile Organic Compound Emissions on a 12-month rolling total calculated by the 20th of each month.
(h) Hazardous Air Pollutants (HAP) emissions on a 12-month rolling total calculated by the 20th of each month, to demonstrate compliance with Facility-wide condition No. 2.1.

[Permit No. 0990021-005-AC]

{Permitting Note: The permittee may elect to use an electronic recordkeeping system in the format of either a spreadsheet or database provided records can be generated when requested by the Health Department.}

REPORTING REQUIREMENTS

F.7 Solvent Operation Records: The permittee shall be able to track the actual amount of solvent throughput and VOC/HAP emissions for this emission unit, reportable on an annual basis in the Annual Operating Report, DEP Form No. 62-210.900(5), F.A.C. The permittee shall submit an Annual Operating Report *[DEP Form No. 62-210.900(5), F.A.C.]*, which summarizes operations for the previous calendar year before April 1 of each year.
[Permit No. 0990021-005-AC, and Rule 62-210.370, F.A.C.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

Sub Section G: This subsection of the permit addresses the following group of emissions units:

EU ID No	Emissions Unit Description
079	**Two GG4-9A JP-8 Fired Combustion Turbines** These units are rated at 19.5 MW, the maximum operating load will be limited to 12.3 MW as requested by applicant. The maximum heat input has been estimated to be about 232.1 MMBTU/hr. The maximum hourly consumption of fuel is estimated to be 29 gallons per minute per engine.

{Permitting Note: The potential emissions of NOx and CO from this emission unit are estimated to be 36.7 and 42.5 tons per year respectively. The project remains as a minor modification under PSD regulations since the project's maximum increase in criteria pollutant emissions for CO and NOx will remain below 100 and 40 tons per year, which are the PSD significant emission rates.}

Operating Restrictions

G.1 Permitted Capacity: The permittee shall not allow, cause, suffer or permit the operation of the combustion turbines in excess of the following capacities without prior authorization from the Permitting Authority:

- The maximum operating load for each of the combustion turbines is 12.3 MW. The turbines are allowed to burn only JP-8 fuel.
  [Permit No: 0990021-008-AC]

G.2 Individual Hours of Operation: The permittee shall not operate any one gas turbine for more than 375 hours per consecutive 12 months, rolling total. This permit must be modified prior to operation beyond this limit. Engines operating more than 400 hours per year shall be tested for nitrogen oxide emissions. **[Permit No: 0990021-008-AC]**

{Permitting Note: The restriction on operating hours of each turbine limits the potential emissions of NOx and CO to 36.7 and 42.5 tons per year respectively}

G.3 Combined Hours of Operation: The combined hours of operation of both gas turbines shall not exceed 750 hours per consecutive 12 months, rolling total. **[Permit No: 0990021-008-AC]**

Emission Limiting and Performance Standards

G.4 RACT Standards for Nitrogen Oxides (NOx): Emissions of NOx from each gas turbine shall not exceed 0.90 lb/MMBtu while firing JP-8 fuel oil. As the turbines are substantially similar, compliance with this limit could be demonstrated by a stack test on one representative turbine unit within a facility. **[Rule 62-296.570(4)(b)5, F.A.C.]**

{Permitting Note: The facility conducted NOx emissions test on July 31, 2008, and demonstrated compliance with 0.90 lb/MMBtu at various load levels.}

Compliance Assurance Monitoring

G.5 Emissions Inventory: The permittee shall maintain a current emissions inventory for each combustion turbine. As a minimum, the emissions inventory shall be reviewed and revised monthly, as needed. The emissions inventory shall include the following information:

(e) Combustion Turbine No.
(f) The hourly average operating load (psia),
(g) The hourly average heat input rate (mmbtu/hr)
(h) Monthly Hours of Operation.
(i) Monthly Fuel consumption [Gallons of JP-8]
(j) Monthly Heat Input [Million BTU/Month]
(k) Average Operating Load [MW] as determined by parametric monitoring (i.e. fuel consumption, assumed efficiency, rpm, etc.) based on a 30-day average.
(l) Emissions data for NOx and CO based on load, water to fuel ratio (if applicable), ambient temperature, ambient pressure, and relative humidity. **[Permit No: 0990021-008-AC]**

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

G.6 Compliance with RACT Standards: Rule 62-296.570(4)(b)5, F.A.C. establishes a NOx emission limiting standard for gas turbines firing fuel oil at 0.90 lb/MMBTU. For units that do not use continuous emission monitors (CEMs), compliance with this emission limit shall be demonstrated through annual stack testing. Rule 62-296.570(4)(a)3, F.A.C. exempts oil-fired units from annual testing requirements if they operate on oil for less than 400 hours per year.

The permittee proposed to limit the hours of operation of each individual turbine to 375 hours per federal fiscal year (October 1- September 30), thus avoiding the need to conduct compliance stack testing on an annual basis. If the rolling 12-month hours of operations exceed 375 hours, the permittee shall notify the Palm Beach County Health Department within 48 hours of the exceedance and conduct a compliance stack for NOx within 30 days of exceeding the 400-hour/yr. **[Rule 62-296.570(4)(a)3, F.A.C., and Permit No: 0990021-008-AC]**

G.7 The permittee shall monitor hourly average operating load (psia) and hourly heat input rate (mmbtu/hr). The emission factors developed, during the stack test conducted on July 31, 2008, at each operating load (psia) shall be used in estimating the monthly NOx and CO emissions. The monthly emissions estimates are used in calculating the 12-month rolling emissions of NOx and CO. The yearly estimates of NOx and CO shall be below the PSD significant emission rates as specified in Chapter 62-212, F.A.C. **[Permit No: 0990021-008-AC]**

G.8 Special Compliance Tests: When the Health Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a DEP rule or permit is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Health Department.
[Rule 62-297.310(7)(b), F.A.C.]

REPORTING AND RECORDKEEPING REQUIREMENTS

G.9 Monthly Emission Records: The permittee shall maintain monthly emission records as described in **Specific Condition G.5** of this permit, on or before the 20th of each month, to summarize site-wide emissions of NOx and CO for the previous 12 months. These records shall include, as a minimum, the monthly emissions and the rolling 12-month total emissions for NOx and CO. These records shall be kept on site for a period of no less than five years and be made available to PBCHD representatives upon request. **[Permit No: 0990021-008-AC]**

G.10 Excess Emissions Reporting: If excess emissions occur, the permittee shall notify the Palm Beach County Health Department (PBCHD) within one (1) working day of the discovery of the excess emission occurrence. The notification shall include the following information: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. Within five (5) days following the initial notification, the owner or operator shall submit a report summarizing the incident to the PBCHD. The incident summary shall include all the information required in the initial notification plus any additional information regarding further actions taken to prevent future excess emissions from occurring. Neither of these notification requirements shall release the permittee from any liability for failure to comply with FDEP rules. **[Permit No: 0990021-008-AC]**

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

SUBSECTION H. This subsection of the permit addresses the following group of emissions units:

EU ID No	Status	Brief Description
080	Regulated	**E-8 Rocket Engine Test Stand** The test stand consists of the Test Site and Propellant Storage Area (PSA). The facility proposes to burn liquid & gaseous methane / liquid oxygen as fuel. This emission unit also has the capability to burn liquid hydrogen/liquid oxygen as fuel. *When operating on hydrogen fuel and oxygen, this emission unit does not use any regulated substances and does not emit any regulated air contaminants.* Currently, the E-8 test stand contains four John Zink utility flares, and three of these flares will be used to burn methane. The facility also proposes to install a burn stack at the PSA to burn any excess methane vented during tanking and pumping. Liquid methane is stored in one 14,000-gallon storage tank and one 3,600-gallon run tank. The total maximum storage of methane at the test stand will be 93,500 lbs.

The E-8 Test stand burn stack includes three John Zink utility flares (BS 202, BS 203 & BS 204). The Propellant Storage Area (PSA) includes the use of one John Zink flare (BS 2002). The facility revised the emissions of Carbon Monoxide (CO) using NASA –Glenn CEA 2002 Software program – that was used for estimating the rocket engine performance. This software was not available to the facility during the initial preparation of the permit application. According to the revised estimations, the CO emissions are 71.24 tons per year, which is still below the significant emission increase, and the emissions of the project are below the PSD thresholds. The previously estimated CO emissions were 24.27 tons per year.

The total emission unit wide CO and NOx emissions are estimated to be 71.24 and 0.19 tons per year respectively. The project remains as a minor modification under PSD regulations since the project's maximum increase in criteria pollutant emissions for CO and NOx will remain below 100 and 40 tons per year, which are the PSD significant emission rates. This emission unit is not subject to 40 CFR Part 63 Subpart PPPP "National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands", since the test stand is used exclusively for testing rocket engines.

Operating Restrictions

H.1 Methods of Operation: The permittee shall not allow, cause, suffer or permit any change in the method(s) of operation resulting in increased short-term or long-term potential emissions, without prior authorization from the permitting authority. The authorized methods of operation include the following.

(a) Fuels: The permittee is authorized to use methane, liquid hydrogen, and liquefied natural gas as rocket engine fuels.

(b) Oxidants: The permittee is authorized to use liquid oxygen (LOX) as the rocket engine fuel oxidizer.

[Permit No. 0990021-010-AC]

H.2 Methane consumption limit: Rocket engine firings shall not consume more than **265,300 pounds (liquid) OR 5.940 mmcf (gaseous) of methane** in any calendar year.

[Permit No. 0990021-010-AC]

*{**Permitting Note:** Based on the fuel consumption limit and the revised emission estimations submitted on 10/09/2008, the emission unit's potential CO emissions are 71.34 tons per year.}*

H.3 Hours of Operation: This emission unit is allowed to operate continuously without exceeding the methane consumption limit as **specified in condition.H.2.**

[Permit No. 0990021-010-AC]

Compliance Monitoring & Record Keeping Requirements

H.4 Fuel Consumption: The permittee shall record and maintain records of the monthly methane consumption at this emission unit. The permittee shall record the same by 20th of the following month. The permittee shall monitor compliance with the annual methane consumption limit, specified in **condition H.2.**

[Permit No. 0990021-010-AC]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

H.5 Record Keeping: The permittee shall maintain the following records:

(a) Test Identification number
(b) Test date and Time (start and finish)
(c) Test duration (planned and actual)
(d) Oxidant and fuel types
(e) Oxidant/fuel ratio (planned and actual)
(f) Fuel usage, and
(g) Daily and Monthly totals of test duration, test firings, and fuel usage.

[Permit No. 0990021-010-AC]

Reporting Requirements

H.6 Test Notification: The permittee shall submit the notification to the PBCHD at least 24 hours prior to a rocket engine test firing. The notification shall include the date and time of the test firing, the expected duration of the test firing, the planned oxidant/fuel ratio, and the planned fuel usage rate.

[Permit No. 0990021-010-AC]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

Sub Section I: This subsection of the permit addresses the following group of emissions units:

EU ID No	STATUS	EMISSIONS UNIT DESCRIPTION
081	Regulated	**Spray Booth (PS-14-SIK): Binks Model PFA-8-7-T-LH spray booth** This booth controls particulate matter emissions with large, dry panel filters. Controlled emissions of particulate matter and uncontrolled emissions of volatile organic compounds are discharged at 50 feet above ground level at ambient temperature from a stack with a 2-foot diameter and a maximum flow rate of 7400 acfm. ***This emission unit was previously permitted as EU # 006 in Sikorsky's air permit – 0990185-004-AF.*** SCC# 4-02-001-10: gallons of coating
082	Regulated	**Spray Booth (PS-16-SIK): Binks auto spray booth** This booth controls particulate matter emissions with large, dry panel filters; controlled emissions of particulate matter and uncontrolled emissions of volatile organic compounds are discharged at 50 feet above ground level at ambient temperature from two identical stacks each with a 5-foot diameter and a maximum flow rate of 27,000 acfm. ***This emission unit was previously permitted as EU # 008 in Sikorsky's air permit – 0990185-004-AF.*** SCC# 4-02-001-10: gallons of coating

{Permitting Note: These units were previously included in a separate air permit issued to Sikorsky Aircraft Corporation, Inc (0990185-001-AF). During the review of application for permit renewal for Pratt & Whitney, it was determined that permits for these two facilities will be combined in to one permit, with United Technologies Corporation as the permittee. Potential emissions of HAPs from EU 081 are2.1 tons per year. Potential emissions of HAPs from EU 082 are 7.5 tons per year.}

The operation of the spray booths includes the following miscellaneous activities:

- *Cleaning operations (hand-wipe, spray gun cleaning, and flush cleaning)*
- *Depainting operations (media blasting, high intensity UV light blasting, and chemical stripping)*
- *Coating operations (primer, top coat, clear coat, and , and specialty coatings}*

{Spray Booth (PS-13-SIK) was removed from this permit according to the permittee's request, since this booth is no longer operational at the facility}

EMISSION LIMITING AND PERFORMANCE STANDARDS

I.1 Air Pollution Control Equipment: In accordance with the manufacturer's recommendations, the permittee shall install, operate, and maintain the following control devices:

(a) *Emissions Unit # 081*: A Binks Model PFA-8-7-T-LH spray booth (or equivalent) with large, dry panel filters, exhaust fan, ductwork, and stack to control particulate matter emissions from surface coating operations. This spray booth is identified by the facility as PS-14-SIK. **[Permit Nos. AC50-113559 & 0990185-001-AF, Permit application]**

(b) *Emissions Unit # 082*: A Binks auto spray booth (or equivalent) with large, dry panel filters, exhaust fan, ductwork, and stack to control particulate matter emissions from surface coating operations. This spray booth is identified by the facility as PS-16-SIK. **[Permit Nos. AC50-191293 & 0990185-001-AF and Permit application]**

I.2 Circumvention: All air pollution control equipment shall be on line and function properly during surface coating operations. **[Rule 62-210.650, F.A.C.]**

I.3 Hours of Operation: There are no restrictions on the hours of operation for these emissions units (8760 hours per year). **[Permit No. 0990185-001-AF, and Permit Application]**

I.4 Allowable Surface Coating: These spray booths may be used to surface coat the exteriors of aircraft and refinish miscellaneous parts and support equipment. The permittee is prohibited from surface coating any newly manufactured metal parts from any production line without first applying for a modification of this permit. **[Permit No. 0990185-001-AF]**

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

{Permitting Note: The painting operations are not subject to VOC RACT limits in Rule 62-296.513, F.A.C. because either a: exterior aircraft are coated, which are exempt under Rule 62-296.513(b)(7), F.A.C., or b: coating of parts results in emissions less than 3 lb VOC/hour and 15 lb VOC/day, which is exempt under Rule 62-296.500(3), F.A.C.}

I.5 Volatile Organic Compounds (VOCs): Emissions of volatile organic compounds (VOCs) from all cleaning, depainting, maskant, priming, and coating operations shall not exceed **2.1** tons from PS-14-SK, and **7.5** tons from PS-16-SIK; in any consecutive 12 months, rolling total. **[Applicant's request]**

I.6 Hazardous Air Pollutants (HAPs): **Facility shall not exceed the limit of facility-wide hazardous air pollutants as specified in Section II Specific condition 2.1. [Applicant's request]**

I.7 40 CFR 63 Subpart HHHHHH: These spray booths are subject to the regulations of 40 CFR Part 63 Subpart HHHHHH "National Emission Standard for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources," which are included in Appendix HHHHHH.

COMPLIANCE MONITORING REQUIREMENTS

I.8 HAP / VOC Content: The permittee shall maintain records at the facility of the content of volatile organic compounds (VOC) and hazardous air pollutants (HAP) in all raw materials used in the surface coating operations. The VOC and HAP of the raw materials shall be determined by Material Safety Data Sheets (MSDS) or engineering calculations. Equivalent methods may be used with prior written approval of the Health Department. **[Permit No. 0990185-001-AF]**

I.9 Spray Booth Usage Logs: For each spray booth, the permittee shall maintain a written log of the usage of coatings, thinners, cleaning agents, and other solvent containing materials. For each use of a spray booth, the operator shall record the following information:

- Date
- Identification of spray booth number (PS-14-SIK, or PS-16-SIK)
- Type of job or job identification number
- Name of coating, thinner, cleaning agent, or other solvent containing material used
- Quantity of material used to the nearest tenth of a gallon

At the end of each month, these log sheets shall be used to compile the Monthly Emissions Report. **[Permit No. 0990185-001-AF]**

I.10 Monthly Emissions Report: The permittee shall be able to demonstrate compliance with the emissions limiting and performance standards of this Subsection on a monthly basis by compiling a Monthly Emissions Report. Prior to the 20th calendar day of each month, the permittee shall calculate and record the following information for the previous month of operation in a written report:

- Month of operation.
- Type, VOC content, HAP content, and total monthly usage (to the nearest tenth of a gallon) of each material used during the month in the cleaning, depainting, maskant, and coating operations.
- Calculated monthly emissions of VOC, each HAP, and combined total HAPs.
- Calculated rolling 12-month total emissions of VOC, each HAP, and combined total HAPs.

The 12-month rolling total pollutant emission rate shall be the sum of the emissions calculated for the given month of operation and the emissions calculated for the previous consecutive 11 calendar months. Calculations must assume 100% of the VOCs and HAPs in the raw materials are emitted to the atmosphere. The actual format of the equations, the calculations, and the report are left to the discretion of the permittee and may be performed by a computer spreadsheet or database, provided the methodology and calculations are defined in the report.

The Monthly Emissions Reports are to be kept on site at the facility and made available to the Health Department upon request. In addition, these reports shall be used to complete the Annual Operating Report, *DEP Form No. 62-210.900(5)*, which is submitted to the Health Department before April 1 of each year. **[Permit No. 0990185-001-AF]**

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

SUBSECTION J. This subsection of the permit addresses the following emissions unit:

EU ID No	STATUS	EMISSIONS UNIT DESCRIPTION
083	Regulated	**Small Boiler (BO-4-SIK):** Steam boiler model CBH-70 is manufactured by Cleaver Brooks and identified by the facility as BO-4-SIK. ***This emission unit was previously permitted as EU # 009 in Sikorsky's permit – 0990185-004-AF.*** SCC# 1-02-006-03: MMCF Gas burned *This unit has a design heat input of 2.93 mmBTU per hour (2845 cubic feet of natural gas per hour). Products of incomplete combustion are discharged to the atmosphere 60 feet above ground level from a 12-inch diameter stack at 200° F exit temperature.*

{Permitting Note: This emission unit was previously permitted as EU # 009 in Sikorsky's permit – 0990185-004-AF. This boiler is not subject to 40 CFR 60 Subpart Dc, since the heat input is less than 10 mmbtu/hr}

EMISSION LIMITING AND PERFORMANCE STANDARDS

J.1 Visible Emissions shall not exceed 20 percent opacity except for one, two-minute period per hour, during which the opacity shall not exceed 40 percent. **[Rule 62-296.406(1), F.A.C.]**

J.2 Particulate Matter and Sulfur Dioxide: Emissions of particulate matter and sulfur dioxide shall be controlled using the Best Available Control Technology (BACT). BACT for this boiler is firing only pipeline quality natural gas.
[Rule 62-296.406(2), F.A.C., Applicant Request]

J.3 Fuel Limitations: In order to comply with the Best Available Control Technology (BACT) determination for particulate matter and sulfur dioxide, fuel shall be limited to pipeline quality natural gas. **[Rule 62-296.406, F.A.C. and Permit No. 0990185-001-AF, Applicant Request]**

J.4 Unrestricted Hours of Operation: The hours of operation for this emissions unit are not limited.
[Permit No. 0990185-001-AF]

COMPLIANCE MONITORING REQUIREMENTS

J.5 Fuel Use Records: In lieu of conducting annual visible emission observations, the permittee can demonstrate compliance with the visible emission standards by maintaining fuel use records that document the exclusive use of pipeline quality natural gas to fuel during the previous federal fiscal year.
[Permit No. 0990021-020-AC]

J.6 Record keeping requirements: The permittee shall be able to monitor and record the actual amount of natural gas consumed and the operating hours on a monthly basis. All records shall be maintained on site at the facility. The annual amount of natural gas consumed by this emission unit shall be included in the Annual Operating Report (AOR), DEP Form N0.62-210.900(5), F.A.C. **[Rule 62-210.370, F.A.C.]**

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

SUBSECTION K. This subsection of the permit addresses the following emissions unit:

EU ID No	STATUS	EMISSIONS UNIT DESCRIPTION
084	Regulated	**Single Chrome Conversion Tank** This tank has 10 gallons capacity. The tank is used to apply alodine, a chromate conversion process, to production parts. Other parts are immersed. Other parts have the alodine brush applied. This process uses hexavalent chromium. The tank vents to general area ventilation.

{Permitting Note: This emission unit is subject to 40 CFR part 63 Subpart WWWWWW "National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations." Chromate conversion coating is a type of conversion coating applied to passivate aluminum to slow corrosion.

The facility submitted the notification of compliance status under Subpart WWWWWW for this emission unit on June 23, 2010.}

PERFORMANCE STANDARDS:

K.1 This emission unit is subject to 40 CFR part 63 Subpart WWWWWW "National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations." Appendix WWWWWW is a part of this permit.
[40 CFR 63 Subpart WWWWWW]

K.2 The tank shall be covered as specified in 40 CFR 63 Subpart WWWWWW.
[40 CFR 63 Subpart WWWWWW]

APPENDIX	DESCRIPTION
A	General Permit Conditions
B	Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 02/05/97)
C	Test Procedures – Rule 62-297.310, F.A.C.
Appendix ZZZZ:	Applicable Requirements from 40 CFR Part 63 Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines
Appendix WWWWWW	National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations
Appendix HHHHHH	National Emission Standard for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

(a) Have access to and copy and records that must be kept under the conditions of the permit;
(b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
(c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

(a) A description of and cause of non-compliance; and
(b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and

403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.

G.13 This permit also constitutes:

(a) Determination of Best Available Control Technology, (BACT does apply)
(b) Determination of Prevention of Significant Deterioration; (PSD does not apply) and
(c) Compliance with New Source Performance Standards (NSPS does not apply).

G.14 The permittee shall comply with the following:

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
(b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
(c) Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The person responsible for performing the sampling or measurements;
3. The dates analyses were performed;
4. The person responsible for performing the analyses;
5. The analytical techniques or methods used; and
6. The results of such analyses.

G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law, which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

APPENDIX B.
Abbreviations, Acronyms, Citations, and Identification Numbers
(Version dated 02/05/97)

Abbreviations and Acronyms:

°F: Degrees Fahrenheit
BACT: Best Available Control Technology
CFR: Code of Federal Regulations
DEP: State of Florida, Department of Environmental Protection
DARM: Division of Air Resource Management
EPA: United States Environmental Protection Agency
F.A.C.: Florida Administrative Code
F.S.: Florida Statute
ISO: International Standards Organization
LAT: Latitude
LONG: Longitude
MMBtu: million British thermal units
MW: Megawatt
ORIS: Office of Regulatory Information Systems
SOA: Specific Operating Agreement
UTM: Universal Transverse Mercator

Citations:

The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, guidance memorandums, permit numbers, and ID numbers.

Code of Federal Regulations:

Example: **[40 CFR 60.334]**

Where:	40	reference to	Title 40
	CFR	reference to	Code of Federal Regulations
	60	reference to	Part 60
	60.334	reference to	Regulation 60.334

Florida Administrative Code (F.A.C.) Rules:

Example: **[Rule 62-213, F.A.C.]**

Where:	62	reference to	Title 62
	62-213	reference to	Chapter 62-213
	62-213.205	reference to	Rule 62-213.205, F.A.C.

ISO: International Standards Organization refers to those conditions at 288 degrees K, 60 percent relative humidity, and 101.3 kilopascals pressure.

APPENDIX B.
Abbreviations, Acronyms, Citations, and Identification Numbers
(Version dated 02/05/97)

Identification Numbers:

Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

105 = 3-digit number code identifying the facility is located in Polk County
0221 = 4-digit number assigned by state database.

Permit Numbers:

Example: 1050221-002-AV, or
1050221-001-AC

Where:
AC = Air Construction Permit
AV = Air Operation Permit (Title V Source)
105 = 3-digit number code identifying the facility is located in Polk County
0221 = 4-digit number assigned by permit tracking database
001 or 002 = 3-digit sequential project number assigned by permit tracking database

Example: PSD-FL-185
PA95-01
AC53-208321
Where:
PSD = Prevention of Significant Deterioration Permit
PA = Power Plant Siting Act Permit
AC = Old Air Construction Permit numbering

APPENDIX C
TEST PROCEDURES - Rule 62-297.310, F.A.C.

C.1 Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. **[Rule 62-297.310(1), F.A.C.]**

C.2 Operating Rate During Testing: Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operating at permitted capacity as defined below. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. **[Rule 62-297.301(2), F.A.C.]**

C.3 Permitted Capacity: Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. **[Rule 62-297.310(2)(b), F.A.C.]**

C.4 Calculation of Emission Rate: The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. **[Rule 62-297.310(3), F.A.C.]**

C.5 Required Sampling Time: Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. **[Rule 62-297.310(4)(a)1, F.A.C.]**

C.6 Opacity Compliance Tests: When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

(a) For batch, cyclical processes, or other operations, which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.

(b) The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.**[Rule 62-297.310(4)(a)2, F.A.C.]**

C.7 Minimum Sample Volume: Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet. **[Rule 62-297.310(4)(b), F.A.C.]**

APPENDIX C
TEST PROCEDURES - Rule 62-297.310, F.A.C.

C.8 Required Flow Rate Range: For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained. **[Rule 62-297.310(4)(c), F.A.C.]**

C.9 Allowed Modification to EPA Method 5: When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. **[Rule 62-297.310(4)(e), F.A.C.]**

C.10 Required Equipment: The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards. **[Rule 62-297.310(5)(a), F.A.C.]**

C.11 Calibration of Sampling Equipment: Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1. **[Rule 62-297.310(4)(d), F.A.C.]**

Table 62-297.310-1
Calibration Schedule

Item	Minimum Calibration Frequency	Reference Instrument	Tolerance
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. Thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 &2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded Max. deviation between readings	Micrometer	+/-0.001" mean of at least three readings .004"
Dry Gas Meter and Orifice Meter	Full Scale: When received, When 5% change observed, Annually 1. One Point: Semiannually 2. Check after each test series	Spirometer or calibrated wet test or dry gas test meter Comparison check	2% 5%

C.12 Accuracy of Equipment: Equipment or instruments used to directly or indirectly determine process variables, Including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted

to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. **[Rule 62-297.310(5)(b), F.A.C.]**

C.13 Required Stack Sampling Facilities. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.

I. The ports shall be capable of being sealed when not in use.

II. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance. 4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.

III. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

I. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.

II. On circular stacks with two sampling ports, the platform shall extend at least 110 degrees around the stack.

III. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.

IV. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e) Access to Work Platform.

I. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

II. Walkways over free-fall areas shall be equipped with safety rails and toeboards.

(f) Electrical Power.

APPENDIX C
TEST PROCEDURES - Rule 62-297.310, F.A.C.

I. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
II. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

(g) Sampling Equipment Support.
I. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
a. The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket, which is one and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
b. A three-eighth inch bolt, which protrudes 2 inches from the stack, may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
II. A complete monorail or dual rail arrangement may be substituted for the eyebolt and bracket.
III. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

C.14 Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.
1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.
2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.
3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to sub-subparagraph 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
a. Did not operate; or
b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours,
4. During each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

a. Visible emissions, if there is an applicable standard;
b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
6. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.
7. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to paragraph 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.
8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
10. An annual compliance test conducted for visible emissions shall not be required for units exempted from air permitting pursuant to subsection 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to subparagraph 62-213.300(2)(a)1., F.A.C., or paragraph 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in paragraph 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.

C.15 Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct a special compliance test. The special compliance test shall be conducted within 15 days of operation of the E.U. outside the design criteria of the AQCS (air quality control system). The special compliance test shall be conducted to document compliance with the emission limitations and to establish a normal range of operation. **[Rule 62-297.310(7)(b), F.A.C.]**

C.16 Waiver of Compliance Test Requirements: If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. **[Rule 62-297.310(7)(c), F.A.C.]**

C.17 Compliance Test Notification: The permittee shall notify the Compliance Authority fifteen (15) days prior to Emission Unit (E.U.) testing. **[Rule 62-297.310(7)(a)(9), F.A.C.]**

APPENDIX C
TEST PROCEDURES - Rule 62-297.310, F.A.C.

C.18 Compliance Test Submittal: Copies of the test report(s) shall be submitted to the Permitting Authority and the Compliance Authority within forty-five (45) days of completion of testing. **[Rule 62-297.310(8)(b), F.A.C.]**

C.19 Test Reports: The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information: **[Rule 62-297.310(8)(c), F.A.C.]**

(a) The type, location, and designation of the emissions unit tested.
(b) The facility at which the emissions unit is located.
(c) The owner or operator of the emissions unit.
(d) The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
(e) The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission-limiting standard.
(f) The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
(g) A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
(h) The date, starting time, and duration of each sampling run.
(i) The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
(j) The number of points sampled and configuration and location of the sampling plane.
(k) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
(l) The type, manufacturer, and configuration of the sampling equipment used.
(m) Data related to the required calibration of the test equipment.
(n) Data on the identification, processing, and weights of all filters used.
(o) Data on the types and amounts of any chemical solutions used.
(p) Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
(q) The names of individuals, who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
(r) All measured and calculated data required to be determined by each applicable test procedure for each run.
(s) The detailed calculations for one run that relate the collected data to the calculated emission rate.
(t) The applicable emission standard, the resulting maximum allowable emission rate for the emissions unit, plus the test results in the same form and unit of measure.
(u) A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

C.20 Recordkeeping: The permittee shall ensure that all records of monitoring information shall specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses. **[Rule 62-213.440(1)(b)2.a., F.A.C.]**

APPENDIX C
TEST PROCEDURES - Rule 62-297.310, F.A.C.

C.21 Record Retention: The permittee shall retain records of all 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 shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. **[Rule 62-213.440(1)(b)2.b., F.A.C.]**

C.22 Alternate Sampling Procedure: The owner or operator of any emissions unit subject to the provisions of this chapter may request in writing a determination by the Secretary or his/her designee that any requirement of this chapter (except for any continuous monitoring requirements) relating to emissions test procedures, methodology, equipment, or test facilities shall not apply to such emissions unit and shall request approval of an alternate procedures or requirements. The request shall set forth the following information, at a minimum:

(a) Specific emissions unit and permit number, if any, for which exception is requested.

(b) The specific provision(s) of this chapter from which an exception is sought.

(c) The basis for the exception, including but not limited to any hardship which would result from compliance with the provisions of this chapter.

(d) The alternate procedure(s) or requirement(s) for which approval is sought and a demonstration that such alternate procedure(s) or requirement(s) shall be adequate to demonstrate compliance with applicable emission limiting standards contained in the rules of the Department or any permit issued pursuant to those rules.

The Secretary or his/her designee shall specify by order each alternate procedure or requirement approved for an individual emissions unit source in accordance with this section or shall issue an order denying the request for such approval. The Department's order shall be final agency action, reviewable in accordance with Section 120.57, Florida Statutes. **[Rule 62-297.620, F.A.C.]**

Appendix ZZZZ
Applicable Requirements from 40 CFR Part 63 Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines

63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source.

63.6590 What parts of my plant does this subpart cover?
(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.
(1) *Existing stationary RICE.*
For stationary RICE located at an area source of HAP emissions, stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

63.6595 When do I have to comply with this subpart?

If you have an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013

63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary CI RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in 40 CFR 63.6620 and Table 4 to this subpart.
(a) If you own or operate an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

63.6604 What fuel requirements must I meet if I own or operate an existing stationary CI RICE?

If you own or operate an existing nonemergency CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.

63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.
(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

If you own or operate an existing CI stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions **or an existing stationary CI RICE located at an area source of HAP emissions you** are subject to the requirements of this section.

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in 40 CFR 63.6595 and according to the provisions in 40 CFR 63.7(a)(2).
(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.
(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
(2) The test must not be older than 2 years.
(3) The test must be reviewed and accepted by the Administrator.
(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

63.6620 What performance tests and other procedures must I use?

a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.
b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart.
d) You must conduct three separate test runs for each performance test required in this section, as specified in 40 CFR63.7(e)(3). Each test run must last at least 1 hour.
(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

(1) $$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 1)}$$

Where:
C_i= concentration of CO or formaldehyde at the control device inlet,
C_o= concentration of CO or formaldehyde at the control device outlet, and
R = percent reduction of CO or formaldehyde emissions.
(2) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2concentration is measured in lieu of oxygen concentration measurement, a CO_2correction factor is needed. Calculate the CO_2correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.
(i) Calculate the fuel-specific $F_o$value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

(1) $$F_o = \frac{0.209\, F_d}{F_c} \qquad \text{(Eq. 2)}$$

Where:
F_o= Fuel factor based on the ratio of oxygen volume to the ultimate CO_2volume produced by the fuel at zero percent excess air.
0.209 = Fraction of air that is oxygen, percent/100.
F_d= Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).
F_c= Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).
(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent oxygen, as follows:

(1) $$X_{co_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 3)}$$

Where:
X_{co2}= CO_2correction factor, percent.
5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2correction value, percent
(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or

NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.
(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.
(1) Identification of the specific parameters you propose to use as operating limitations;
(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;
(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.
(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.
(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.,* operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.,* wear and tear, error, etc.) on a routine basis or over time;
(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;
(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;
(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;
(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;
(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and
(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.
(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided

63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

(g) If you own or operate an existing non-emergency CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (g)(2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska not accessible by the FAHS do not have to meet the requirements of paragraph (g) in this section.
(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or (2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.
(h) If you operate a new or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed

30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary engine that is subject to the work, operation or management practices in items 1, 2, or 4 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil before continuing to use the engine. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.
(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.
(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the engine according to the conditions described in paragraphs (f)(1) through (4) of this section.
1) For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.
(2) There is no time limit on the use of emergency stationary RICE in emergency situations.
(3) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.
The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.
(4) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is

not limited by this paragraph (f)(4), as long as the power provided by the financial arrangement is limited to emergency power.

63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;
(2) An existing stationary CI RICE located at an area source of HAP emissions.

63.6650 What reports must I submit and when?

You must submit each report in Table 7 of this subpart that applies to you.
(b) Unless the Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.
(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.
(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.
(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.
(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.
(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.
(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.
(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.
(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.
(1) Company name and address.
(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
(3) Date of report and beginning and ending dates of the reporting period.
(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.
(3) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.
(4) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in 40 CFR63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.
(4) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.
(5) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

63.6655 What records must I keep?

If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(3), (b)(1) through (b)(3) and (c) of this section.
A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR63.10(b)(2)(xiv).
(2) Records of the occurrence and duration of each malfunction of operation (*i.e.,* process equipment) or the air pollution control and monitoring equipment.
(3) Records of performance tests and performance evaluations as required in 40 CFR63.10(b)(2)(viii).
(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.
(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;
(1) An existing stationary CI RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.
(2) An existing stationary emergency CI RICE.
(3) An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.
(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the nonresettable hour meter. The owner or operator must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.
(1) An existing emergency stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.
(2) An existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines. ???

63.6660 In what form and how long must I keep my records?

Your records must be in a form suitable and readily available for expeditious review according to 40 CFR63.10(b)(1).

As specified in 40 CFR63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

63.6675 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

Black start engine means an engine whose only purpose is to start up a combustion turbine.

CAA means the Clean Air Act (42 U.S.C. 7401 *et seq.,* as amended by Public Law 101–549, 104 Stat. 2399).

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.

(4) Fails to satisfy the general duty to minimize emissions established by 40 CFR63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (*e.g.* biodiesel) that is suitable for use in compression ignition engines

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO_2.

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, *etc.* Stationary CI ICE used for peak shaving are not considered emergency stationary ICE. Stationary CI ICE used to supply power to an electric grid or that supply nonemergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under 40 CFR 63.6640(f). Emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may also operate an additional 50 hours per year in non-emergency situations. All other emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f).

Engine startup means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes “rich” glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The “lean” glycol is then recycled.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO_2.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

Major Source, as used in this subpart, shall have the same meaning as in 40 CFR63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in 40 CFR63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in 40 CFR63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NO_X) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_X, CO, and volatile organic compounds (VOC) into CO_2, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (*i.e.,* remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in 40 CFR63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to 40 CFR63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to 40 CFR63.1270(a)(2).

Production field facility means those oil and gas production facilities located prior to the point of custody transfer.

Production well means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C_3H_8.

Residential/commercial/institutional emergency stationary RICE means an emergency stationary RICE used in residential establishments such as homes or residences, commercial establishments such as office buildings, hotels, or stores, or institutional establishments such as medical centers, research centers, and institutions of higher education.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO_X (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition means relating to: either a gasoline-fueled engine; or any other type of engine a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differs from mobile RICE in that stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart PPPPP of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

Table 2b
Operating Limitations for Existing Non- Emergency Compression Ignition Stationary RICE >500 HP,

As stated in 40 CFR 63.6600, 63.6601, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed lean burn and existing, new and reconstructed compression ignition stationary RICE:

For each ...	You must meet the following operating limitation ...
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.	a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and
	b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.[1]
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst.	Comply with any operating limitations approved by the Administrator.

[1] Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.

Table 2d
Requirements for Existing Compression Ignition Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following emission and operating limitations for existing compression ignition stationary RICE:

For each …	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must ...
1. Non-Emergency, non-black start CI ≤ 300 HP.	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
2. Non-Emergency, non-black start CI 300<HP≤500.	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O2; or	
	b. Reduce CO emissions by 70 percent or more.	
3. Non-Emergency, non-black start CI > 500 HP.	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O2; or	
	b. Reduce CO emissions by 70 percent or more.	
4. Emergency CI and black start CI.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1] Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.
[2] If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

Table 3 Subsequent Performance Tests As stated in 40 CFR 63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:		
For each . . .	**Complying with the requirement to . . .**	**You must . . .**
4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are not limited use stationary RICE.	Limit or reduce CO or formaldehyde emissions.	Conduct subsequent performance tests every 8,760 hrs or 3 years, whichever comes first.

Table 4
Requirements for Performance Tests
As stated in §40 CFR 63.6610, 63.6611, 63.6612, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE for existing sources:

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI stationary RICE.	a. Reduce CO emissions.	i. Measure the O2 at the inlet and outlet of the control device; and	(1) Portable CO and O2 analyzer.	(a) Using ASTM D6522–00 (2005) [a, b] (incorporated by reference, see 40 CFR 63.14). Measurements to determine O2 must be made at the same time as the measurements for CO concentration.
		ii. Measure the CO at the inlet and the outlet of the control device.	(1) Portable CO and O2 analyzer.	(a) Using ASTM D6522–00 (2005) a,b (incorporated by reference, see 40 CFR 63.14) or Method 10 of 40 CFR appendix A. The CO concentration must be at 15 percent O2, dry basis.
3. Stationary RICE	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust.	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A 40 CFR 63.7(d)(1)(i).	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O2 concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005).	(a) Measurements to determine O2 concentration must be made at the same time and location as the measurements for formaldehyde concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03.	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 of 40 CFR part 63, appendix A; or ASTM D6348–03 [c], provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130.	(a) Formaldehyde concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. Measure CO at the exhaust of the stationary RICE.	(1) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522–00 (2005) [a], Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03.	(a) CO concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour longer runs.

[a] You may also use Methods 3A and 10 as options to ASTM–D6522–00 (2005). You may obtain a copy of ASTM–D6522–00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM–D6522–00 (2005) may be used to test both CI and SI stationary RICE.
[b] You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03.
[c] You may obtain a copy of ASTM–D6348–03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

Table 5
Initial Compliance With Emission Limitations and Operating Limitations
As stated in §40 CFR 63.6612, 63.6625 and63.6630, you must initially comply with the emission and operating limitations as required by the following:

For each . .	Complying with the requirement to…	You have demonstrated initial compliance if ...
8. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source.	a. Reduce CO or formaldehyde emissions ...	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
9. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source.	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust.	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O2, dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.

Table 6
Continuous Compliance With Emission Limitations and Operating Limitations
As stated in 40 CFR 63.6640, you must continuously comply with the required by the following: emissions and operating limitations as

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
8. Stationary RICE >500 HP located at a major source.	Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR.	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit a; and ii. Collecting the approved operating parameter (if any) data according to 40 CFR 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
9. Existing stationary CI RICE not subject to any numerical emission limitations.	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions
10. Existing stationary RICE >500 HP that are not limited use stationary RICE, except 4SRB >500 HP located at major sources. 11. Existing limited use stationary RICE >500 HP that are limited use CI stationary RICE.	a. Reduce CO or formaldehyde emissions; or b. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust. a. Reduce CO or formaldehyde emissions; or b. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust.	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit. i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit.

[a] After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

Table 7
Requirements for Reports
As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

You must submit a(n) . . .	The report must contain. . .	You must submit the report . . .
1. Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or	i. Semiannually according to the requirements in 40 CFR 63.6650(b)(1)–(5) for engines that are not limited use stationary CI RICE subject to numerical emission limitations; and ii. Annually according to the requirements in 40 CFR 63.6650(b)(6)–(9) for engines that are limited use stationary CI RICE subject to numerical emission limitations.
	b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in 40 CFR 63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), the information in 40 CFR 63.6650(e); or	i. Semiannually according to the requirements in 40 CFR 63.6650(b).
	c. If you had a malfunction during the reporting period, the information in 40 CFR 63.6650(c)(4).	i. Semiannually according to the requirements in 40 CFR 63.6650(b).
2. Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in 40 CFR 63.6650.
	b. The operating limits provided in your Federally enforceable permit, and any deviations from these limits; and	i. See item 2.a.i.
	c. Any problems or errors suspected with the meters.	i. See item 2.a.i.

Table 8
Applicability of General Provisions to Subpart ZZZZ
As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
63.1	General applicability of the General Provisions.	Yes.	
63.2	Definitions	Yes	Additional terms defined in 63.6675.
63.3	Units and abbreviations	Yes.	
63.4	Prohibited activities and circumvention	Yes.	
63.5	Construction and reconstruction	Yes.	
63.6(a)	Applicability	Yes.	
63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources.	Yes.	
63.6(b)(5)	Notification	Yes.	
63.6(b)(6)	[Reserved]		
63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources.	Yes.	
63.6(c)(1)–(2)	Compliance dates for existing sources	Yes.	
63.6(c)(3)–(4)	[Reserved]		
63.6(c)(5)	Compliance dates for existing area sources that become major sources.	Yes.	
63.6(d)	[Reserved]		
63.6(e)	Operation and maintenance	No.	
63.6(f)(1)	Applicability of standards	No.	
63.6(f)(2)	Methods for determining compliance	Yes.	
63.6(f)(3)	Finding of compliance	Yes.	
63.6(g)(1)–(3)	Use of alternate standard	Yes.	
63.6(h)	Opacity and visible emission standards	No ...	Subpart ZZZZ does not contain opacity or visible emission standards.
63.6(i)	Compliance extension procedures and criteria.	Yes.	
63.6(j)	Presidential compliance exemption	Yes.	
63.7(a)(1)–(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 63.6610, 63.6611, and 63.6612.
63.7(a)(3)	CAA section 114 authority	Yes.	
63.7(b)(1)	Notification of performance test	Yes	Except that 63.7(b)(1) only applies as specified in 63.6645.
63.7(b)(2)	Notification of rescheduling	Yes	Except that 63.7(b)(2) only applies as specified in 63.6645.
63.7(c)	Quality assurance/test plan	Yes	Except that 63.7(c) only applies as specified in 63.6645.-
63.7(d)	Testing facilities	Yes.	
63.7(e)(1)	Conditions for conducting performance tests.	No.	Subpart ZZZZ specifies conditions for con-ducting performance tests at 63.6620.
63.7(e)(2)	Conduct of performance tests and reduction of data.	Yes	Subpart ZZZZ specifies test methods at 63.6620.
63.7(e)(3)	Test run duration	Yes.	
63.7(e)(4)	Administrator may require other testing under section 114 of the CAA.	Yes.	
63.7(f)	Alternative test method provisions	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
63.7(g)	Performance test data analysis, recordkeeping, and reporting.	Yes.	
63.7(h)	Waiver of tests	Yes.	
63.8(a)(1)	Applicability of monitoring requirements	Yes ...	Subpart ZZZZ contains specific requirements for monitoring at 63.6625.
63.8(a)(2)	Performance specifications	Yes.	
63.8(a)(3)	[Reserved]		
63.8(a)(4)	Monitoring for control devices	No.	
63.8(b)(1)	Monitoring	Yes.	
63.8(b)(2)–(3)	Multiple effluents and multiple monitoring systems.	Yes.	
63.8(c)(1)	Monitoring system operation and maintenance.	Yes.	
63.8(c)(1)(i)	Routine and predictable SSM	Yes.	
63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan.	Yes.	
63.8(c)(1)(iii)	Compliance with operation and maintenance requirements.	Yes.	
63.8(c)(2)–(3)	Monitoring system installation	Yes.	
63.8(c)(4)	Continuous monitoring system (CMS) requirements.	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
63.8(c)(5)	COMS minimum procedures	No .	Subpart ZZZZ does not require COMS.
63.8(c)(6)–(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
63.8(d)	CMS quality control	Yes.	
63.8(e)	CMS performance evaluation	Yes	Except for 63.8(e)(5)(ii), which applies to COMS. Except that 63.8(e) only applies as specified in 63.6645.
63.8(f)(1)–(5)	Alternative monitoring method	Yes .	Except that 63.8(f)(4) only applies as specified in 63.6645.
63.8(f)(6)	Alternative to relative accuracy test	Yes .	Except that 63.8(f)(6) only applies as specified in 63.6645.
63.8(g)	Data reduction	Yes ..	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 63.6635 and 63.6640.
63.9(a)	Applicability and State delegation of notification requirements.	Yes.	
63.9(b)(1)–(5)	Initial notifications	Yes	Except that 63.9(b)(3) is reserved. Except that 63.9(b) only applies as specified in 63.6645.
63.9(c)	Request for compliance extension	Yes	Except that 63.9(c) only applies as specified in 63.6645.
63.9(d)	Notification of special compliance requirements for new sources.	Yes .	Except that 63.9(d) only applies as specified in 63.6645.

General provisions citation	Subject of citation	Applies to subpart	Explanation
63.9(e)	Notification of performance test	Yes .	Except that 63.9(e) only applies as specified in 63.6645.
63.9(f)	Notification of visible emission (VE)/opacity test.	No ..	Subpart ZZZZ does not contain opacity or VE standards.
63.9(g)(1)	Notification of performance evaluation	Yes .	Except that 63.9(g) only applies as specified in 63.6645.
63.9(g)(2)	Notification of use of COMS data	No ..	Subpart ZZZZ does not contain opacity or VE standards.
63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded.	Yes .	If alternative is in use. Except that 63.9(g) only applies as specified in 63.6645.
63.9(h)(1)–(6)	Notification of compliance status	Yes .	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 63.9(h)(4) is reserved. Except that 63.9(h) only applies as specified in 63.6645.
63.9(i)	Adjustment of submittal deadlines	Yes.	
63.9(j)	Change in previous information	Yes.	
63.10(a)	Administrative provisions for recordkeeping/reporting.	Yes.	
63.10(b)(1)	Record retention	Yes.	
63.10(b)(2)(i)–(v)	Records related to SSM	No.	
63.10(b)(2)(vi)–(xi)	Records	Yes.	
63.10(b)(2)(xii)	Record when under waiver	Yes.	
63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes..	For CO standard if using RATA alternative.
63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
63.10(b)(3)	Records of applicability determination	Yes.	
63.10(c)	Additional records for sources using CEMS.	Yes	Except that 63.10(c)(2)–(4) and (9) are reserved.
63.10(d)(1)	General reporting requirements	Yes.	
63.10(d)(2)	Report of performance test results	Yes.	
63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
63.10(d)(4)	Progress reports	Yes.	
63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
63.10(e)(2)(ii)	COMS-related report	No ..	Subpart ZZZZ does not require COMS.
63.10(e)(3)	Excess emission and parameter	Yes..	Except that 63.10(e)(3)(i) (C) is reserved.
63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
63.10(f)	Waiver for recordkeeping/reporting	Yes.	
63.11	Flares	No.	
63.12	State authority and delegations	Yes.	
63.13	Addresses	Yes.	
63.14	Incorporation by reference	Yes.	
63.15	Availability of information	Yes.	

40 CFR 63 Subpart WWWWWW—

National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations

Source: 73 FR 37741, July 1, 2008, unless otherwise noted.

Applicability and Compliance Dates

§ 63.11504 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a plating and polishing facility that is an area source of hazardous air pollutant (HAP) emissions and meets the criteria specified in paragraphs (a)(1) through (3) of this section.

(1) A plating and polishing facility is a plant site that is engaged in one or more of the processes listed in paragraphs (a)(1)(i) through (vi) of this section.

(i) Electroplating other than chromium electroplating (i.e., non-chromium electroplating).

(ii) Electroless or non-eletrolytic plating.

(iii) Other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying.

(iv) Dry mechanical polishing of finished metals and formed products after plating.

(v) Electroforming.

(vi) Electropolishing.

(2) An area source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control that does not have the potential to emit any single HAP at a rate of 9.07 megagrams per year (Mg/yr) (10 tons per year (tpy)) or more and any combination of HAP at a rate of 22.68 Mg/yr (25 tpy) or more.

(3) Your plating and polishing facility uses or has emissions of compounds of one or more plating and polishing metal HAP, which means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, as defined in §63.11511, “What definitions apply to this subpart?” With the exception of lead, plating and polishing metal HAP also include any of these metals in the elemental form.

(b) [Reserved]

§ 63.11505 What parts of my plant does this subpart cover?

(a) This subpart applies to each new or existing affected source, as specified in paragraphs (a)(1) through (3) of this section, at all times. A new source is defined in §63.11511, “What definitions apply to this subpart?”

(1) Each tank that contains one or more of the plating and polishing metal HAP, as defined in §63.11511, “What definitions apply to this subpart?”, and is used for non-chromium electroplating; electroforming; electropolishing; electroless plating or other non-electrolytic metal coating operations, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

(2) Each thermal spraying operation that applies one or more of the plating and polishing metal HAP, as defined in §63.11511, “What definitions apply to this subpart?”

(3) Each dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP, as defined in §63.11511, “What definitions apply to this subpart?”

(b) An affected source is existing if you commenced construction or reconstruction of the affected source on or before March 14, 2008.

(c) An affected source is new if you commenced construction or reconstruction of the affected source after March 14, 2008.

(d) This subpart does not apply to any of the process units or operations described in paragraphs (d)(1) through (6) of this section.

(1) Process units that are subject to the requirements of 40 CFR part 63, subpart N (National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks).

(2) Research and development process units, as defined in §63.11511, "What definitions apply to this subpart?"

(3) Process units that are used strictly for educational purposes.

(4) Thermal spraying conducted to repair surfaces.

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

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

(e) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, "Title V," provided you are not otherwise required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

§ 63.11506 What are my compliance dates?

(a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart no later than July 1, 2010.

(b) If you own or operate a new affected source for which the initial startup date is on or before July 1, 2008, you must achieve compliance with the provisions of this subpart no later than July 1, 2008.

(c) If you own or operate a new affected source for which the initial startup date is after July 1, 2008, you must achieve compliance with the provisions of this subpart upon initial startup of your affected source.

Standards and Compliance Requirements

§ 63.11507 What are my standards and management practices?

(a) If you own or operate an affected new or existing non-cyanide electroplating, electroforming, or electropolishing tank (hereafter referred to as an "electrolytic" process tank, as defined in §63.11511, "What definitions apply to this subpart?") that contains one or more of the plating and polishing metal HAP and operates at a pH of less than 12, you must comply with the requirements in paragraph (a)(1), (2), or (3) of this section, and implement the applicable management practices in paragraph (g) of this section, as practicable.

(1) You must use a wetting agent/fume suppressant, as defined in §63.11511, "What definitions apply to this subpart?", in the bath of the affected tank according to paragraphs (a)(1)(i) through (iii) of this section.

(i) You must initially add the wetting agent/fume suppressant in the amounts recommended by the manufacturer for the specific type of electrolytic process.

(ii) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the tank bath, as in the original make-up of the tank.

(iii) If a wetting agent/fume suppressant is included in the electrolytic process bath chemicals used in the affected tank according to the manufacturer's instructions, it is not necessary to add additional wetting agent/fume suppressants to the tank to comply with this rule.

(2) You must capture and exhaust emissions from the affected tank to any one of the following emission control devices: composite mesh pad, packed bed scrubber, or mesh pad mist eliminator, according to paragraphs (a)(2)(i) and (ii) of this section.

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

(ii) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(3) You must cover the tank surface according to paragraph (a)(3)(i) or (ii) of this section.

(i) For batch electrolytic process tanks, as defined in §63.11511, "What definitions apply to this subpart?", you must use a tank cover, as defined in §63.11511, over all of the effective surface area of the tank for at least 95 percent of the electrolytic process operating time.

(ii) For continuous electrolytic process tanks, as defined in §63.11511, "What definitions apply to this subpart?", you must cover at least 75 percent of the surface of the tank, as defined in §63.11511, whenever the electrolytic process tank is in operation.

(b) If you own or operate an affected new or existing "flash" or short-term electroplating tank, as defined in §63.11511, "What definitions apply to this subpart?", that uses or emits one or more of the plating and polishing metal HAP, you must comply with the requirements specified in paragraph (b)(1) or (b)(2), and implement the applicable management practices in paragraph (g) of this section, as practicable.

(1) You must limit short-term or "flash" electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(2) You must use a tank cover, as defined in §63.11511, "What definitions apply to this subpart?", for at least 95 percent of the plating time.

(c) If you own or operate an affected new or existing process tank that is used both for short-term electroplating and for electrolytic processing of longer duration (i.e., processing that does not meet the definition of short-term or flash electroplating) and contains one or more of the plating and polishing metal HAP, you must meet the requirements specified in paragraph (a) or (b) of this section, whichever apply to the process operation, and implement the applicable management practices in paragraph (g) of this section, as practicable.

(d) If you own or operate an affected new or existing electroplating tank that uses cyanide in the plating bath, operates at pH greater than or equal to 12, and contains one or more of the plating and polishing metal HAP, you must comply with the requirements in paragraphs (d)(1) and (2) of this section:

(1) You must measure and record the pH of the tank upon start-up. No additional pH measurements are required.

(2) You must implement the applicable management practices in paragraph (g) of this section, as practicable.

(e) If you own or operate an affected new or existing dry mechanical polishing equipment that emits one or more of the plating and polishing metal HAP, you must operate a capture system that captures particulate matter (PM) emissions from the dry mechanical polishing process and transports the emissions to a cartridge, fabric, or high efficiency particulate air (HEPA) filter, according to paragraphs (e)(1) and (2) of this section.

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

(2) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(f) If you own or operate an affected thermal spraying operation that applies one or more of the plating and polishing metal HAP, you must meet the applicable requirements specified in paragraphs (f)(1) through (3) of this section, and the applicable management practices in paragraph (g) of this section.

(1) For existing permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a water curtain, fabric filter, or HEPA filter, according to paragraphs (f)(1)(i) and (ii) of this section.

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

(ii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(2) For new permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a fabric or HEPA filter, according to paragraphs (f)(2)(i) and (ii) of this section.

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

(ii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(3) For temporary thermal spraying operations, as defined in §63.11511 “What definitions apply to this subpart?”, you must meet the applicable requirements specified in paragraphs (f)(3)(i) and (ii) of this section.

(i) You must document the amount of time the thermal spraying occurs each day, and where it is conducted.

(ii) You must implement the applicable management practices specified in paragraph (g) of this section, as practicable.

(g) If you own or operate an affected new or existing plating and polishing process unit that contains, applies, or emits one or more of the plating and polishing metal HAP, you must implement the applicable management practices in paragraphs (g)(1) through (12) of this section, as practicable.

(1) Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements.

(2) Maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable.

(3) Optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable.

(4) Use tank covers, if already owned and available at the facility, whenever practicable.

(5) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).

(6) Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.

(7) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable.

(8) Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable.

(9) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable.

(10) Minimize spills and overflow of tanks, as practicable.

(11) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.

(12) Perform regular inspections to identify leaks and other opportunities for pollution prevention.

§ 63.11508 What are my compliance requirements?

(a) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with §63.11509(b) of "What are my notification, reporting, and recordkeeping requirements?"

(b) You must be in compliance with the applicable management practices and equipment standards in this subpart at all times.

(c) To demonstrate initial compliance, you must satisfy the requirements specified in paragraphs (c)(1) through (11) of this section.

(1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(1)(i) through (iv) of this section.

(i) You must add wetting agent/fume suppressant to the bath of each affected tank according to manufacturer's specifications and instructions.

(ii) You must state in your Notification of Compliance Status that you add wetting agent/fume suppressant to the bath according to manufacturer's specifications and instructions.

(iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(2) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a control system, as defined in §63.11511, "What definitions apply to this subpart?", to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(2)(i) through (v) of this section.

(i) You must install a control system designed to capture emissions from the affected tank and exhaust them to a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator.

(ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.

(iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(v) You must follow the manufacturer's specifications and operating instructions for the control systems at all times.

(3) If you own or operate an affected batch electrolytic process tank, as defined in §63.11511, "What definitions apply to this subpart?", that contains one or more of the plating and polishing metal HAP and which is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a tank cover, as defined in §63.11511, to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(3)(i) through (iv) of this section.

(i) You must install a tank cover on the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.

(iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(4) If you own or operate an affected continuous electrolytic process tank, as defined in §63.11511, "What definitions apply to this subpart?", that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you cover the tank surface to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(4)(i) through (iv) of this section.

(i) You must cover at least 75 percent of the surface area of the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the surface cover in place whenever the continuous electrolytic process is in operation.

(iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), "What are my standards and management practices?", and you comply with this subpart by limiting the plating time of the affected tank, you must demonstrate initial compliance according to paragraphs (c)(5)(i) through (iii) of this section.

(i) You must state in your Notification of Compliance Status that you limit short-term or flash electroplating to no more than 1 cumulative hour per day, or 3 cumulative minutes per hour of plating time.

(ii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(6) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), "What are my standards and management practices?", and you comply by operating the affected tank with a cover, you must demonstrate initial compliance according to paragraphs (c)(6)(i) through (iv) of this section.

(i) You must install a tank cover on the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the plating time.

(iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(7) If you own or operate an affected tank that contains one or more of the plating and polishing metal HAP, uses cyanide in the bath, and is subject to the management practices specified in §63.11507(d), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(7)(i) through (iii) of this section.

(i) You must report in your Notification of Compliance Status the pH of the bath solution that was measured at start-up, according to the requirements of §63.11507(d)(1).

(ii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

(iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11490(g), “What are my standards and management practices?”, as practicable.

(8) If you own or operate an affected dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(e), “What are my standards and management practices?”, you must demonstrate initial compliance according to paragraphs (c)(8)(i) through (iii) of this section.

(i) You must install a control system that is designed to capture PM emissions from the polishing operation and exhaust them to a cartridge, fabric, or HEPA filter.

(ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.

(iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(9) If you own or operate an existing affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(f)(1), “What are my standards and management practices?”, you must demonstrate initial compliance according to paragraphs (c)(9)(i) through (iii) of this section.

(i) You must install a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a water curtain, fabric filter, or HEPA filter.

(ii) You must state in your Notification of Compliance Status that you have installed and are operating the control system according to the manufacturer's specifications and instructions.

(iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(10) If you own or operate a new affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(f)(2), “What are my standards and management practices?”, you must demonstrate initial compliance according to paragraphs (c)(10)(i) through (iii) of this section.

(i) You must install and operate a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a fabric or HEPA filter.

(ii) You must state in your Notification of Compliance Status that you have installed and operate the control system according to the manufacturer's specifications and instructions.

(iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(11) If you own or operate an affected temporary thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(f)(3), “What are my standards and management practices?”, you must demonstrate initial compliance according to paragraphs (c)(11)(i) and (ii) of this section.

(i) You must implement the applicable management practices specified in §63.11507(g), “What are my standards and management practices?”, as practicable.

(ii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), “What are my standards and management practices?”, as practicable.

(d) To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this subpart, you must satisfy the requirements specified in paragraphs (d)(1) through (8) of this section.

(1) You must always operate and maintain your affected source, including air pollution control equipment.

(2) You must prepare an annual compliance certification according to the requirements specified in §63.11509(c), “Notification, Reporting, and Recordkeeping,” and keep it in a readily-accessible location for inspector review.

(3) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate continuous compliance according to paragraphs (d)(3)(i) through (iii) of this section.

(i) You must record that you have added the wetting agent/fume suppressant to the tank bath in the original make-up of the tank.

(ii) For tanks where the wetting agent/fume suppressant is a separate purchased ingredient from the other tank additives, you must demonstrate continuous compliance according to paragraphs (d)(3)(ii) (A) and (B) this section.

(A) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the tank bath, as in the original make-up of the tank.

(B) You must record each addition of wetting agent/fume suppressant to the tank bath.

(iii) You must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer's specifications and instructions.

(4) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a control system to comply with this subpart; an affected dry mechanical polishing operation that is subject to §63.11507(e); or an affected thermal spraying operation that is subject to §63.11507(f)(1) or (2), you must demonstrate continuous compliance according to paragraphs (d)(4)(i) through (v) of this section.

(i) You must operate and maintain the control system according to the manufacturer's specifications and instructions.

(ii) Following any malfunction or failure of the capture or control devices to operate properly, you must take immediate corrective action to return the equipment to normal operation according to the manufacturer's specifications and operating instructions.

(iii) You must state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions.

(iv) You must record the results of all control system inspections, deviations from proper operation, and any corrective action taken.

(v) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), "What are my standards and management practices?", and you comply with this subpart by limiting the plating time for the affected tank, you must demonstrate continuous compliance according to paragraphs (d)(5)(i) through (iii) of this section.

(i) You must limit short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(ii) You must record the times that the affected tank is operated each day.

(iii) You must state in your annual compliance certification that you have limited short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(6) If you own or operate an affected batch electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements of §63.11507(a), "What are my standards and management practices?", or a flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), and you comply by operating the affected tank with a cover, you must demonstrate continuous compliance according to paragraphs (d)(6)(i) through (iii) of this section.

(i) You must operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.

(ii) You must record the times that the tank is operated and the times that the tank is covered on a daily basis.

(iii) You must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.

(7) If you own or operate an affected continuous electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you cover your tanks to comply with this subpart, you must demonstrate continuous compliance according to paragraphs (d)(7)(i) and (ii) of this section.

(i) You must operate the tank with at least 75 percent of the surface covered during all periods of electrolytic process operation.

(ii) You must state in your annual certification that you have operated the tank with 75 percent of the surface covered during all periods of electrolytic process operation.

(8) If you own or operate an affected tank or other operation that is subject to the management practices specified in §63.11507(g), "What are my standards and management practices?", you must demonstrate continuous compliance according to paragraphs (d)(8)(i) and (ii) of this section.

(i) You must implement the applicable management practices during all times that the affected tank or process is in operation.

(ii) You must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.

§ 63.11509 What are my notification, reporting, and recordkeeping requirements?

(a) If you own or operate an affected source, as defined in §63.11505(a), "What parts of my plant does this subpart cover?", you must submit an Initial Notification in accordance with paragraphs (a)(1) through (4) of this section by the dates specified.

(1) The Initial Notification must include the information specified in §63.9(b)(2)(i) through (iv) of the General Provisions of this part.

(2) The Initial Notification must include a description of the compliance method (e.g., use of wetting agent/fume suppressant) for each affected source.

(3) If you start up your affected source on or before July 1, 2008, you must submit an Initial Notification not later than 120 calendar days after July 1, 2008.

(4) If you start up your new affected source after July 1, 2008, you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart.

(b) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with paragraphs (b)(1) and (2) of this section.

(1) The Notification of Compliance Status must be submitted before the close of business on the compliance date specified in §63.11506, "What are my compliance dates?"

(2) The Notification of Compliance Status must include the items specified in paragraphs (b)(2)(i) through (iv) of this section.

(i) List of affected sources and the plating and polishing metal HAP used in, or emitted by, those sources.

(ii) Methods used to comply with the applicable management practices and equipment standards.

(iii) Description of the capture and emission control systems used to comply with the applicable equipment standards.

(iv) Statement by the owner or operator of the affected source as to whether the source is in compliance with the applicable standards or other requirements.

(c) If you own or operate an affected source, you must prepare an annual certification of compliance report according to paragraphs (c)(1) through (7) of this section. These reports do not need to be submitted unless a deviation from the requirements of this subpart has occurred during the reporting year, in which case, the annual compliance report must be submitted along with the deviation report.

(1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that is subject to the requirements in §63.11507(a)(1), "What are my standards and management practices?", you must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer's specifications and instructions.

(2) If you own or operate any one of the affected sources listed in paragraphs (c)(2)(i) through (iii) of this section, you must state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions.

(i) Electroplating, electroforming, or electropolishing tank that is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a control system to comply with this subpart;

(ii) Dry mechanical polishing operation that is subject to §63.11507(e); or

(iii) Permanent thermal spraying operation that is subject to §63.11507(f)(1) or (2).

(3) If you own or operate an affected flash or short-term electroplating tank that is subject to the requirements in §63.11507(b), "What are my standards and management practices?", and you comply with this subpart by limiting the plating time of the affected tank, you must state in your annual compliance certification that you have limited short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(4) If you own or operate an affected batch electrolytic process tank that is subject to the requirements of §63.11507(a) or a flash or short-term electroplating tank that is subject to the requirements in §63.11507(b), "What are my standards and management practices?", and you comply by operating the affected tank with a cover, you must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.

(5) If you own or operate an affected continuous electrolytic process tank that is subject to the requirements of §63.11507(a), "What are my standards and management practices?", and you comply by operating the affected tank with a cover, you must state in your annual certification that you have covered at least 75 percent of the surface area of the tank during all periods of electrolytic process operation.

(6) If you own or operate an affected tank that is subject to the management practices specified in §63.11507(g), "What are my standards and management practices?", you must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.

(7) Each annual compliance report must be prepared no later than January 31 of the year immediately following the reporting period and kept in a readily-accessible location for inspector review. If a deviation has occurred during the year, each annual compliance report must be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period.

(d) If you own or operate an affected source, and any deviations from the compliance requirements specified in this subpart occurred during the year, you must report the deviations, along with the corrective action taken, and submit this report to the delegated authority.

(e) You must keep the records specified in paragraphs (e)(1) through (3) of this section.

(1) A copy of any Initial Notification and Notification of Compliance Status that you submitted and all documentation supporting those notifications.

(2) The records specified in §63.10(b)(2)(i) through (iii) and (xiv) of the General Provisions of this part.

(3) The records required to show continuous compliance with each management practice and equipment standard that applies to you, as specified in §63.11508(d), "What are my compliance requirements?"

(f) You must keep each record for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1) of the General Provisions to part 63. You may keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.11510 What General Provisions apply to this subpart?

If you own or operate a new or existing affected source, you must comply with the requirements of the General Provisions (40 CFR part 63, subpart A) according to Table 1 of this subpart.

§ 63.11511 What definitions apply to this subpart?

Terms used in this subpart are defined in this section.

Batch electrolytic process tank means a tank used for an electrolytic process in which a part or group of parts, typically mounted on racks or placed in barrels, is placed in the tank and immersed in an electrolytic process solution as a single unit (i.e., as a batch) for a predetermined period of time, during which none of the parts are removed from the tank and no other parts are added to the tank, and after which the part or parts are removed from the tank as a unit.

Bath means the liquid contents of a tank that is used for electroplating, electroforming, electropolishing, or other metal coating processes at a plating and polishing facility.

Capture system means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device, as part of a complete control system. A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

Cartridge filter means a type of control device that uses perforated metal cartridges containing a pleated paper or non-woven fibrous filter media to remove PM from a gas stream by sieving and other mechanisms. Cartridge filters can be designed with single use cartridges, which are removed and disposed after reaching capacity, or continuous use cartridges, which typically are cleaned by means of a pulse-jet mechanism.

Composite mesh pad means a type of control device similar to a mesh pad mist eliminator except that the device is designed with multiple pads in series that are woven with layers of material with varying fiber diameters, which produce a coalescing effect on the droplets or PM that impinge upon the pads.

Continuous electrolytic process tank means a tank that uses an electrolytic process and in which a continuous metal strip or other type of continuous substrate is fed into and removed from the tank continuously. This process is also called reel-to-reel electrolytic plating.

Control device means equipment that is part of a control system that collects and/or reduces the quantity of a pollutant that is emitted to the air. The control device receives emissions that are transported from the process by the capture system.

Control system means the combination of a capture system and a control device. The capture system is designed to collect and transport air emissions from the affected source to the control device. The overall control efficiency of any control system is a combination of the ability of the system to capture the air emissions (i.e., the capture efficiency) and the control device efficiency. Consequently, it is important to achieve good capture to ensure good overall control efficiency. Capture devices that are known to provide high capture efficiencies include hoods, enclosures, or any other duct intake devices with ductwork, dampers, manifolds, plenums, or fans.

Cyanide plating means plating processes performed in tanks that use cyanide as a major bath ingredient and that operate at pH of 12 or more, and use or emit any of the plating and polishing metal HAP, as defined in this section. Electroplating and electroforming are performed with or without cyanide. The cyanide in the bath works to dissolve the HAP metal added as a cyanide compound (e.g., cadmium cyanide) and creates free cyanide in solution, which helps to corrode the anode. These tanks are self-regulating to a pH of 12 due to the caustic nature of the cyanide bath chemistry. The cyanide in the bath is a major bath constituent and not an additive; however, the self-regulating chemistry of the bath causes the bath to act as if wetting agents/fume suppressants are being used and to ensure an optimum plating process. All cyanide plating baths at pH

greater than or equal to 12 have cyanide-metal complexes in solution. The metal HAP to be plated is not emitted because it is either bound in the metal-cyanide complex or reduced at the cathode to elemental metal, and plated onto the immersed parts. Cyanide baths are not intentionally operated at pH less 12 since unfavorable plating conditions would occur in the tank, among other negative effects.

Deviation means any instance in which an affected source or an owner or operator of such an affected source:

(1) Fails to meet any requirement or obligation established by this rule including, but not limited to, any equipment standard (including emissions and operating limits), management practice, or operation and maintenance requirement;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this rule and that is included in the operating permit for any affected facility required to obtain such a permit; or

(3) Fails to meet any equipment standard (including emission and operating limits), management standard, or operation and maintenance requirement in this rule during startup, shutdown, or malfunction.

Dry mechanical polishing means a process used for removing defects from and smoothing the surface of finished metals and formed products after plating with any of the plating and polishing metal HAP, as defined in this section, using hard-faced abrasive wheels or belts and where no liquids or fluids are used to trap the removed metal particles.

Electroforming means an electrolytic process using or emitting any of the plating and polishing metal HAP, as defined in this section, that is used for fabricating metal parts. This process is essentially the same as electroplating except that the plated substrate (mandrel) is removed, leaving only the metal plate. In electroforming, the metal plate is self-supporting and generally thicker than in electroplating.

Electroless plating means a non-electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Electroless plating is also called non-electrolytic plating. Examples include, but are not limited to, chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

Electrolytic plating processes means electroplating and electroforming that use or emit any of the plating and polishing metal HAP, as defined in this section, where metallic ions in a plating bath or solution are reduced to form a metal coating on the surface of parts and products using electrical energy.

Electroplating means an electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metal ions in solution are reduced onto the surface of the work piece (the cathode) via an electrical current. The metal ions in the solution are usually replenished by the dissolution of metal from solid metal anodes fabricated of the same metal being plated, or by direct replenishment of the solution with metal salts or oxides; electroplating is also called electrolytic plating.

Electropolishing means an electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which a work piece is attached to an anode immersed in a bath, and the metal substrate is dissolved electrolytically, thereby removing the surface contaminant; electropolishing is also called electrolytic polishing.

Fabric filter means a type of control device used for collecting PM by filtering a process exhaust stream through a filter or filter media. A fabric filter is also known as a baghouse.

Flash electroplating means an electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that is used no more than 3 cumulative minutes per hour or no more than 1 cumulative hour per day.

General Provisions of this part (40 CFR part 63, subpart A) means the section of the Code of Federal Regulations (CFR) that addresses air pollution rules that apply to all HAP sources addressed in part 63, which includes the National Emission Standards for Hazardous Air Pollutants (NESHAP).

HAP means hazardous air pollutant as defined from the list of 188 chemicals and compounds specified in the CAA Amendments of 1990; HAP are also called “air toxics.” The five plating and polishing metal HAP, as defined in this section, are on this list of 188 chemicals.

High efficiency particulate air (HEPA) filter means a type of control device that uses a filter composed of a mat of randomly arranged fibers and is designed to remove at least 99.97 percent of airborne particles that are 0.3 micrometers or larger in diameter.

Mesh pad mist eliminator means a type of control device, consisting of layers of interlocked filaments densely packed between two supporting grids that remove liquid droplets and PM from the gas stream through inertial impaction and direct interception.

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

New source means any affected source for which you commenced construction or reconstruction after March 14, 2008.

Non-cyanide electrolytic plating and electropolishing processes means electroplating, electroforming, and electropolishing that uses or emits any of the plating and polishing metal HAP, as defined in this section, performed without cyanide in the tank. These processes do not use cyanide in the tank and operate at pH values less than 12. These processes use electricity and add or remove metals such as metal HAP from parts and products used in manufacturing. Both electroplating and electroforming can be performed with cyanide as well.

Non-electrolytic plating means a process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Non-electrolytic plating is also called electroless plating. Examples include chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

Packed-bed scrubber means a type of control device that includes a single or double packed bed that contains packing media on which PM and droplets impinge and are removed from the gas stream. The packed-bed section of the scrubber is followed by a mist eliminator to remove any water entrained from the packed-bed section.

Plating and polishing facility means a facility engaged in one or more of the following processes that uses or emits any of the plating and polishing metal HAP, as defined in this section: Electroplating processes other than chromium electroplating (i.e., non-chromium electroplating); electroless plating; other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; thermal spraying; and the dry mechanical polishing of finished metals and formed products after plating.

Plating and polishing metal HAP means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form, with the exception of lead. Any material that does not contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight, and does not contain manganese in amounts greater than or equal to 1.0 percent by weight, as reported on the Material Safety Data Sheet for the material, is not considered to be a plating and polishing metal HAP.

Plating and polishing process tanks means any tank in which a process is performed at an affected plating and polishing facility that uses or has the potential to emit any of the plating and polishing metal HAP, as defined in this section. The processes performed in plating and polishing tanks include the following: Electroplating processes other than chromium electroplating (i.e., non-chromium electroplating) performed in a tank; electroless plating; and non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and electropolishing. This term does not include tanks containing solutions that are used to rinse or wash parts prior to placing the parts in a plating and polishing process tank, or subsequent to removing the parts from a plating and polishing process tank. This term also does not include thermal spraying or dry polishing with machines.

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

Research and development process unit means any process unit that is used for conducting research and development for new processes and products and is not used to manufacture products for commercial sale, except in a *de minimis* manner.

Short-term plating means an electroplating process that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that is used no more than 3 cumulative minutes per hour or 1 hour cumulative per day.

Tank cover for batch process units means a solid structure made of an impervious material that is designed to cover the entire open surface of a tank or process unit that is used for plating or other metal coating processes.

Tank cover for continuous process units, means a solid structure or combination of structures, made of an impervious material that is designed to cover at least 75 percent of the open surface of the tank or process unit that is used for continuous plating or other continuous metal coating processes.

Temporary thermal spraying means a thermal spraying operation that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that lasts no more than 1 hour in duration during any one day and is conducted in situ. Thermal spraying that is conducted in a dedicated thermal spray booth or structure is not considered to be temporary thermal spraying.

Thermal spraying (also referred to as metal spraying or flame spraying) is a process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which a metallic coating is applied by projecting molten or semi-molten metal particles onto a substrate. Commonly-used thermal spraying methods include high velocity oxy-fuel (HVOF) spraying, flame spraying, electric arc spraying, plasma arc spraying, and detonation gun spraying.

Water curtain means a type of control device that draws the exhaust stream through a continuous curtain of moving water to scrub out suspended PM.

Wetting agent/fume suppressant means any chemical agent that reduces or suppresses fumes or mists from a plating and polishing tank by reducing the surface tension of the tank bath.

§ 63.11512 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by EPA or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (5) of this section.

(1) Approval of an alternative non-opacity emissions standard under 40 CFR 63.6(g), of the General Provisions of this part.

(2) Approval of an alternative opacity emissions standard under §63.6(h)(9), of the General Provisions of this part.

(3) Approval of a major change to test methods under §63.7(e)(2)(ii) and (f), of the General Provisions of this part. A “major change to test method” is defined in §63.90.

(4) Approval of a major change to monitoring under §63.8(f), of the General Provisions of this part. A “major change to monitoring” is defined in §63.90.

(5) Approval of a major change to recordkeeping and reporting under §63.10(f), of the General Provisions of this part. A “major change to recordkeeping/reporting” is defined in §63.90.

§ 63.11513 [Reserved]

Table 1 to Subpart WWWWWW of Part 63. Applicability of General Provisions to Plating and Polishing Area Sources

As required in §63.11510, "What General Provisions apply to this subpart?", you must meet each requirement in the following table that applies to you.

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

[1]Section 63.11505(e), "What parts of my plant does this subpart cover?", exempts affected sources from the obligation to obtain title V operating permits.

Subpart HHHHHH—National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

Source: 73 FR 1759, Jan. 9, 2008, unless otherwise noted.

What This Subpart Covers

§ 63.11169 What is the purpose of this subpart?

Except as provided in paragraph (d) of this section, this subpart establishes national emission standards for hazardous air pollutants (HAP) for area sources involved in any of the activities in paragraphs (a) through (c) of this section. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards contained herein.

(a) Paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl), Chemical Abstract Service number 75092, in paint removal processes;

(b) Autobody refinishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations;

(c) Spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.

(d) This subpart does not apply to any of the activities described in paragraph (d)(1) through (6) of this section.

(1) Surface coating or paint stripping performed on site at installations owned or operated by the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State), the National Aeronautics and Space Administration, or the National Nuclear Security Administration.

(2) Surface coating or paint stripping of military munitions, as defined in §63.11180, manufactured by or for the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State) or equipment directly and exclusively used for the purposes of transporting military munitions.

(3) Surface coating or paint stripping performed by individuals on their personal vehicles, possessions, or property, either as a hobby or for maintenance of their personal vehicles, possessions, or property. This subpart also does not apply when these operations are performed by individuals for others without compensation. An individual who spray applies surface coating to more than two motor vehicles or pieces of mobile equipment per year is subject to the requirements in this subpart that pertain to motor vehicle and mobile equipment surface coating regardless of whether compensation is received.

(4) Surface coating or paint stripping that meets the definition of “research and laboratory activities” in §63.11180.

(5) Surface coating or paint stripping that meets the definition of “quality control activities” in §63.11180.

(6) Surface coating or paint stripping activities that are covered under another area source NESHAP.

§ 63.11170 Am I subject to this subpart?

(a) You are subject to this subpart if you operate an area source of HAP as defined in paragraph (b) of this section, including sources that are part of a tribal, local, State, or Federal facility and you perform one or more of the activities in paragraphs (a)(1) through (3) of this section:

(1) Perform paint stripping using MeCl for the removal of dried paint (including, but not limited to, paint, enamel, varnish, shellac, and lacquer) from wood, metal, plastic, and other substrates.

(2) Perform spray application of coatings, as defined in §63.11180, to motor vehicles and mobile equipment including operations that are located in stationary structures at fixed locations, and mobile repair and refinishing operations that travel to the customer's location, except spray coating applications that meet the definition of facility maintenance in §63.11180. However, if you are the owner or operator of a motor vehicle or mobile equipment surface coating operation, you may petition the Administrator for an exemption from this subpart if you can demonstrate, to the satisfaction of the Administrator, that you spray apply no coatings that contain the target HAP, as defined in §63.11180. Petitions must include a description of the coatings that you spray apply and your certification that you do not spray apply any coatings containing the target HAP. If circumstances change such that you intend to spray apply coatings containing the target HAP, you must submit the initial notification required by 63.11175 and comply with the requirements of this subpart.

(3) Perform spray application of coatings that contain the target HAP, as defined in §63.11180, to a plastic and/or metal substrate on a part or product, except spray coating applications that meet the definition of facility maintenance or space vehicle in §63.11180.

(b) An area source of HAP is a source of HAP that is not a major source of HAP, is not located at a major source, and is not part of a major source of HAP emissions. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (Mg) (10 tons) or more per year, or emit any combination of HAP at a rate of 22.68 Mg (25 tons) or more per year.

§ 63.11171 How do I know if my source is considered a new source or an existing source?

(a) This subpart applies to each new and existing affected area source engaged in the activities listed in §63.11170, with the exception of those activities listed in §63.11169(d) of this subpart.

(b) The affected source is the collection of all of the items listed in paragraphs (b)(1) through (6) of this section. Not all affected sources will have all of the items listed in paragraphs (b)(1) through (6) of this section.

(1) Mixing rooms and equipment;

(2) Spray booths, ventilated prep stations, curing ovens, and associated equipment;

(3) Spray guns and associated equipment;

(4) Spray gun cleaning equipment;

(5) Equipment used for storage, handling, recovery, or recycling of cleaning solvent or waste paint; and

(6) Equipment used for paint stripping at paint stripping facilities using paint strippers containing MeCl.

(c) An affected source is a new source if it meets the criteria in paragraphs (c)(1) and (c)(2) of this section.

(1) You commenced the construction of the source after September 17, 2007 by installing new paint stripping or surface coating equipment. If you purchase and install spray booths, enclosed spray gun cleaners, paint stripping equipment to reduce MeCl emissions, or purchase new spray guns to comply with this subpart at an existing source, these actions would not make your existing source a new source.

(2) The new paint stripping or surface coating equipment is used at a source that was not actively engaged in paint stripping and/or miscellaneous surface coating prior to September 17, 2007.

(d) An affected source is reconstructed if it meets the definition of reconstruction in §63.2.

(e) An affected source is an existing source if it is not a new source or a reconstructed source.

General Compliance Requirements

§ 63.11172 When do I have to comply with this subpart?

The date by which you must comply with this subpart is called the compliance date. The compliance date for each type of affected source is specified in paragraphs (a) and (b) of this section.

(a) For a new or reconstructed affected source, the compliance date is the applicable date in paragraph (a)(1) or (2) of this section:

(1) If the initial startup of your new or reconstructed affected source is after September 17, 2007, the compliance date is January 9, 2008.

(2) If the initial startup of your new or reconstructed affected source occurs after January 9, 2008, the compliance date is the date of initial startup of your affected source.

(b) For an existing affected source, the compliance date is January 10, 2011.

§ 63.11173 What are my general requirements for complying with this subpart?

(a) Each paint stripping operation that is an affected area source must implement management practices to minimize the evaporative emissions of MeCl. The management practices must address, at a minimum, the practices in paragraphs (a)(1) through (5) of this section, as applicable, for your operations.

(1) Evaluate each application to ensure there is a need for paint stripping (e.g., evaluate whether it is possible to re-coat the piece without removing the existing coating).

(2) Evaluate each application where a paint stripper containing MeCl is used to ensure that there is no alternative paint stripping technology that can be used.

(3) Reduce exposure of all paint strippers containing MeCl to the air.

(4) Optimize application conditions when using paint strippers containing MeCl to reduce MeCl evaporation (e.g., if the stripper must be heated, make sure that the temperature is kept as low as possible to reduce evaporation).

(5) Practice proper storage and disposal of paint strippers containing MeCl (e.g., store stripper in closed, air-tight containers).

(b) Each paint stripping operation that has annual usage of more than one ton of MeCl must develop and implement a written MeCl minimization plan to minimize the use and emissions of MeCl. The MeCl minimization plan must address, at a minimum, the management practices specified in paragraphs (a)(1) through (5) of this section, as applicable, for your operations. Each operation must post a placard or sign outlining the MeCl minimization plan in each area where paint stripping operations subject to this subpart occur. Paint stripping operations with annual usage of less than one ton of MeCl, must comply with the requirements in paragraphs (a)(1) through (5) of this section, as applicable, but are not required to develop and implement a written MeCl minimization plan.

(c) Each paint stripping operation must maintain copies of annual usage of paint strippers containing MeCl on site at all times.

(d) Each paint stripping operation with annual usage of more than one ton of MeCl must maintain a copy of their current MeCl minimization plan on site at all times.

(e) Each motor vehicle and mobile equipment surface coating operation and each miscellaneous surface coating operation must meet the requirements in paragraphs (e)(1) through (e)(5) of this section.

(1) All painters must be certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment. The minimum requirements for training and certification are described in paragraph (f) of this section. The spray application of surface coatings is prohibited by persons who are not certified as having completed the training described in paragraph (f) of this section. The requirements of this paragraph do not apply to the students of an accredited surface coating training program who are under the direct supervision of an instructor who meets the requirements of this paragraph.

(2) All spray-applied coatings must be applied in a spray booth, preparation station, or mobile enclosure that meets the requirements of paragraph (e)(2)(i) of this section and either paragraph (e)(2)(ii), (e)(2)(iii), or (e)(2)(iv) of this section.

(i) All spray booths, preparation stations, and mobile enclosures must be fitted with a type of filter technology that is demonstrated to achieve at least 98-percent capture of paint overspray. The procedure used to demonstrate filter efficiency must be consistent with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Method 52.1, “Gravimetric and Dust-Spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter, June 4, 1992” (incorporated by reference, see §63.14 of subpart A of this part). The test coating for measuring filter efficiency shall be a high solids bake enamel delivered at a rate of at least 135 grams per minute from a conventional (non-HVLP) air-atomized spray gun operating at 40 pounds per square inch (psi) air pressure; the air flow rate across the filter shall be 150 feet per minute. Owners and operators may use published filter efficiency data provided by filter vendors to demonstrate compliance with this requirement and are not required to perform this measurement. The requirements of this paragraph do not apply to waterwash spray booths that are operated and maintained according to the manufacturer's specifications.

(ii) Spray booths and preparation stations used to refinish complete motor vehicles or mobile equipment must be fully enclosed with a full roof, and four complete walls or complete side curtains, and must be ventilated at negative pressure so that air is drawn into any openings in the booth walls or preparation station curtains. However, if a spray booth is fully enclosed and has seals on all doors and other openings and has an automatic pressure balancing system, it may be operated at up to, but not more than, 0.05 inches water gauge positive pressure.

(iii) Spray booths and preparation stations that are used to coat miscellaneous parts and products or vehicle subassemblies must have a full roof, at least three complete walls or complete side curtains, and must be ventilated so that air is drawn into the booth. The walls and roof of a booth may have openings, if needed, to allow for conveyors and parts to pass through the booth during the coating process.

(iv) Mobile ventilated enclosures that are used to perform spot repairs must enclose and, if necessary, seal against the surface around the area being coated such that paint overspray is retained within the enclosure and directed to a filter to capture paint overspray.

(3) All spray-applied coatings must be applied with a high volume, low pressure (HVLP) spray gun, electrostatic application, airless spray gun, air-assisted airless spray gun, or an equivalent technology that is demonstrated by the spray gun manufacturer to achieve transfer efficiency comparable to one of the spray gun technologies listed above for a comparable operation, and for which written approval has been obtained from the Administrator. The procedure used to demonstrate that spray gun transfer efficiency is equivalent to that of an HVLP spray gun must be equivalent to the California South Coast Air Quality Management District's “Spray Equipment Transfer

Efficiency Test Procedure for Equipment User, May 24, 1989" and "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002" (incorporated by reference, see §63.14 of subpart A of this part). The requirements of this paragraph do not apply to painting performed by students and instructors at paint training centers. The requirements of this paragraph do not apply to the surface coating of aerospace vehicles that involves the coating of components that normally require the use of an airbrush or an extension on the spray gun to properly reach limited access spaces; to the application of coatings on aerospace vehicles that contain fillers that adversely affect atomization with HVLP spray guns; or to the application of coatings on aerospace vehicles that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.).

(4) All paint spray gun cleaning must be done so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects used gun cleaning solvent. Spray gun cleaning may be done with, for example, hand cleaning of parts of the disassembled gun in a container of solvent, by flushing solvent through the gun without atomizing the solvent and paint residue, or by using a fully enclosed spray gun washer. A combination of non-atomizing methods may also be used.

(5) As provided in §63.6(g), we, the U.S. Environmental Protection Agency, may choose to grant you permission to use an alternative to the emission standards in this section after you have requested approval to do so according to §63.6(g)(2).

(f) Each owner or operator of an affected miscellaneous surface coating source must ensure and certify that all new and existing personnel, including contract personnel, who spray apply surface coatings, as defined in §63.11180, are trained in the proper application of surface coatings as required by paragraph (e)(1) of this section. The training program must include, at a minimum, the items listed in paragraphs (f)(1) through (f)(3) of this section.

(1) A list of all current personnel by name and job description who are required to be trained;

(2) Hands-on and classroom instruction that addresses, at a minimum, initial and refresher training in the topics listed in paragraphs (f)(2)(i) through (2)(iv) of this section.

(i) Spray gun equipment selection, set up, and operation, including measuring coating viscosity, selecting the proper fluid tip or nozzle, and achieving the proper spray pattern, air pressure and volume, and fluid delivery rate.

(ii) Spray technique for different types of coatings to improve transfer efficiency and minimize coating usage and overspray, including maintaining the correct spray gun distance and angle to the part, using proper banding and overlap, and reducing lead and lag spraying at the beginning and end of each stroke.

(iii) Routine spray booth and filter maintenance, including filter selection and installation.

(iv) Environmental compliance with the requirements of this subpart.

(3) A description of the methods to be used at the completion of initial or refresher training to demonstrate, document, and provide certification of successful completion of the required training. Owners and operators who can show by documentation or certification that a painter's work experience and/or training has resulted in training equivalent to the training required in paragraph (f)(2) of this section are not required to provide the initial training required by that paragraph to these painters.

(g) As required by paragraph (e)(1) of this section, all new and existing personnel at an affected motor vehicle and mobile equipment or miscellaneous surface coating source, including contract personnel, who spray apply surface coatings, as defined in §63.11180, must be trained by the dates specified in paragraphs (g)(1) and (2) of this

section. Employees who transfer within a company to a position as a painter are subject to the same requirements as a new hire.

(1) If your source is a new source, all personnel must be trained and certified no later than 180 days after hiring or no later than July 7, 2008, whichever is later. Painter training that was completed within five years prior to the date training is required, and that meets the requirements specified in paragraph (f)(2) of this section satisfies this requirement and is valid for a period not to exceed five years after the date the training is completed.

(2) If your source is an existing source, all personnel must be trained and certified no later than 180 days after hiring or no later than January 10, 2011, whichever is later. Painter training that was completed within five years prior to the date training is required, and that meets the requirements specified in paragraph (f)(2) of this section satisfies this requirement and is valid for a period not to exceed five years after the date the training is completed.

(3) Training and certification will be valid for a period not to exceed five years after the date the training is completed, and all personnel must receive refresher training that meets the requirements of this section and be re-certified every five years.

[73 FR 1760, Jan. 9, 2008; 73 FR 8408, Feb. 13, 2008]

§ 63.11174 What parts of the General Provisions apply to me?

(a) Table 1 of this subpart shows which parts of the General Provisions in subpart A apply to you.

(b) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

Notifications, Reports, and Records

§ 63.11175 What notifications must I submit?

(a) Initial Notification. If you are the owner or operator of a paint stripping operation using paint strippers containing MeCl and/or a surface coating operation subject to this subpart, you must submit the initial notification required by §63.9(b). For a new affected source, you must submit the Initial Notification no later than 180 days after initial startup or July 7, 2008, whichever is later. For an existing affected source, you must submit the initial notification no later than January 11, 2010. The initial notification must provide the information specified in paragraphs (a)(1) through (8) of this section.

(1) The company name, if applicable.

(2) The name, title, street address, telephone number, e-mail address (if available), and signature of the owner and operator, or other certifying company official;

(3) The street address (physical location) of the affected source and the street address where compliance records are maintained, if different. If the source is a motor vehicle or mobile equipment surface coating operation that repairs vehicles at the customer's location, rather than at a fixed location, such as a collision repair shop, the notification should state this and indicate the physical location where records are kept to demonstrate compliance;

(4) An identification of the relevant standard (i.e., this subpart, 40 CFR part 63, subpart HHHHHH);

(5) A brief description of the type of operation as specified in paragraph (a)(5)(i) or (ii) of this section.

(i) For all surface coating operations, indicate whether the source is a motor vehicle and mobile equipment surface coating operation or a miscellaneous surface coating operation, and include the number of spray booths and preparation stations, and the number of painters usually employed at the operation.

(ii) For paint stripping operations, identify the method(s) of paint stripping employed (e.g., chemical, mechanical) and the substrates stripped (e.g., wood, plastic, metal).

(6) Each paint stripping operation must indicate whether they plan to annually use more than one ton of MeCl after the compliance date.

(7) A statement of whether the source is already in compliance with each of the relevant requirements of this subpart, or whether the source will be brought into compliance by the compliance date. For paint stripping operations, the relevant requirements that you must evaluate in making this determination are specified in §63.11173(a) through (d) of this subpart. For surface coating operations, the relevant requirements are specified in §63.11173(e) through (g) of this subpart.

(8) If your source is a new source, you must certify in the initial notification whether the source is in compliance with each of the requirements of this subpart. If your source is an existing source, you may certify in the initial notification that the source is already in compliance. If you are certifying in the initial notification that the source is in compliance with the relevant requirements of this subpart, then include also a statement by a responsible official with that official's name, title, phone number, e-mail address (if available) and signature, certifying the truth, accuracy, and completeness of the notification, a statement that the source has complied with all the relevant standards of this subpart, and that this initial notification also serves as the notification of compliance status.

(b) Notification of Compliance Status. If you are the owner or operator of a new source, you are not required to submit a separate notification of compliance status in addition to the initial notification specified in paragraph (a) of this subpart provided you were able to certify compliance on the date of the initial notification, as part of the initial notification, and your compliance status has not since changed. If you are the owner or operator of any existing source and did not certify in the initial notification that your source is already in compliance as specified in paragraph (a) of this section, then you must submit a notification of compliance status. You must submit a Notification of Compliance Status on or before March 11, 2011. You are required to submit the information specified in paragraphs (b)(1) through (4) of this section with your Notification of Compliance Status:

(1) Your company's name and the street address (physical location) of the affected source and the street address where compliance records are maintained, if different.

(2) The name, title, address, telephone, e-mail address (if available) and signature of the owner and operator, or other certifying company official, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance. For paint stripping operations, the relevant requirements that you must evaluate in making this determination are specified in §63.11173(a) through (d). For surface coating operations, the relevant requirements are specified in §63.11173(e) through (g).

(3) The date of the Notification of Compliance Status.

(4) If you are the owner or operator of an existing affected paint stripping source that annually uses more than one ton of MeCl, you must submit a statement certifying that you have developed and are implementing a written MeCl minimization plan in accordance with §63.11173(b).

§ 63.11176 What reports must I submit?

(a) Annual Notification of Changes Report. If you are the owner or operator of a paint stripping, motor vehicle or mobile equipment, or miscellaneous surface coating affected source, you are required to submit a report in each calendar year in which information previously submitted in either the initial notification required by §63.11175(a), Notification of Compliance, or a previous annual notification of changes report submitted under this paragraph, has changed. Deviations from the relevant requirements in §63.11173(a) through (d) or §63.11173(e) through (g) on the date of the report will be deemed to be a change. This includes notification when paint stripping affected sources that have not developed and implemented a written MeCl minimization plan in accordance with §63.11173(b) used more than one ton of MeCl in the previous calendar year. The annual notification of changes report must be submitted prior to March 1 of each calendar year when reportable changes have occurred and must include the information specified in paragraphs (a)(1) through (2) of this section.

(1) Your company's name and the street address (physical location) of the affected source and the street address where compliance records are maintained, if different.

(2) The name, title, address, telephone, e-mail address (if available) and signature of the owner and operator, or other certifying company official, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance.

(b) If you are the owner or operator of a paint stripping affected source that has not developed and implemented a written MeCl minimization plan in accordance with §63.11173(b) of this subpart, you must submit a report for any calendar year in which you use more than one ton of MeCl. This report must be submitted no later than March 1 of the following calendar year. You must also develop and implement a written MeCl minimization plan in accordance with §63.11173(b) no later than December 31. You must then submit a Notification of Compliance Status report containing the information specified in §63.11175(b) by March 1 of the following year and comply with the requirements for paint stripping operations that annually use more than one ton of MeCl in §§63.11173(d) and 63.11177(f).

§ 63.11177 What records must I keep?

If you are the owner or operator of a surface coating operation, you must keep the records specified in paragraphs (a) through (d) and (g) of this section. If you are the owner or operator of a paint stripping operation, you must keep the records specified in paragraphs (e) through (g) of this section, as applicable.

(a) Certification that each painter has completed the training specified in §63.11173(f) with the date the initial training and the most recent refresher training was completed.

(b) Documentation of the filter efficiency of any spray booth exhaust filter material, according to the procedure in §63.11173(e)(3)(i).

(c) Documentation from the spray gun manufacturer that each spray gun with a cup capacity equal to or greater than 3.0 fluid ounces (89 cc) that does not meet the definition of an HVLP spray gun, electrostatic application, airless spray gun, or air assisted airless spray gun, has been determined by the Administrator to achieve a transfer efficiency equivalent to that of an HVLP spray gun, according to the procedure in §63.11173(e)(4).

(d) Copies of any notification submitted as required by §63.11175 and copies of any report submitted as required by §63.11176.

(e) Records of paint strippers containing MeCl used for paint stripping operations, including the MeCl content of the paint stripper used. Documentation needs to be sufficient to verify annual usage of paint strippers containing

MeCl (e.g., material safety data sheets or other documentation provided by the manufacturer or supplier of the paint stripper, purchase receipts, records of paint stripper usage, engineering calculations).

(f) If you are a paint stripping source that annually uses more than one ton of MeCl you are required to maintain a record of your current MeCl minimization plan on site for the duration of your paint stripping operations. You must also keep records of your annual review of, and updates to, your MeCl minimization plan.

(g) Records of any deviation from the requirements in §§63.11173, 63.11174, 63.11175, or 63.11176. These records must include the date and time period of the deviation, and a description of the nature of the deviation and the actions taken to correct the deviation.

(h) Records of any assessments of source compliance performed in support of the initial notification, notification of compliance status, or annual notification of changes report.

§ 63.11178 In what form and for how long must I keep my records?

(a) If you are the owner or operator of an affected source, you must maintain copies of the records specified in §63.11177 for a period of at least five years after the date of each record. Copies of records must be kept on site and in a printed or electronic form that is readily accessible for inspection for at least the first two years after their date, and may be kept off-site after that two year period.

Other Requirements and Information

§ 63.11179 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (EPA), or a delegated authority such as your State, local, or tribal agency. If the Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator and are not transferred to the State, local, or tribal agency.

(c) The authority in §63.11173(e)(5) will not be delegated to State, local, or tribal agencies.

§ 63.11180 What definitions do I need to know?

Terms used in this subpart are defined in the Clean Air Act, in 40 CFR 63.2, and in this section as follows:

Additive means a material that is added to a coating after purchase from a supplier (e.g., catalysts, activators, accelerators).

Administrator means, for the purposes of this rulemaking, the Administrator of the U.S. Environmental Protection Agency or the State or local agency that is granted delegation for implementation of this subpart.

Aerospace vehicle or component means any fabricated part, processed part, assembly of parts, or completed unit, with the exception of electronic components, of any aircraft including but not limited to airplanes, helicopters, missiles, rockets, and space vehicles.

Airless and air-assisted airless spray mean any paint spray technology that relies solely on the fluid pressure of the paint to create an atomized paint spray pattern and does not apply any atomizing compressed air to the paint

before it leaves the paint nozzle. Air-assisted airless spray uses compressed air to shape and distribute the fan of atomized paint, but still uses fluid pressure to create the atomized paint.

Appurtenance means any accessory to a stationary structure coated at the site of installation, whether installed or detached, including but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lamp posts; partitions; pipes and piping systems; rain gutters and downspouts; stairways, fixed ladders, catwalks, and fire escapes; and window screens.

Architectural coating means a coating to be applied to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs.

Cleaning material means a solvent used to remove contaminants and other materials, such as dirt, grease, or oil, from a substrate before or after coating application or from equipment associated with a coating operation, such as spray booths, spray guns, racks, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.

Coating means, for the purposes of this subpart, a material spray-applied to a substrate for decorative, protective, or functional purposes. For the purposes of this subpart, coating does not include the following materials:

(1) Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances.

(2) Paper film or plastic film that may be pre-coated with an adhesive by the film manufacturer.

(3) Adhesives, sealants, maskants, or caulking materials.

(4) Temporary protective coatings, lubricants, or surface preparation materials.

(5) In-mold coatings that are spray-applied in the manufacture of reinforced plastic composite parts.

Compliance date means the date by which you must comply with this subpart.

Deviation means any instance in which an affected source, subject to this subpart, or an owner or operator of such a source fails to meet any requirement or obligation established by this subpart.

Dry media blasting means abrasive blasting using dry media. Dry media blasting relies on impact and abrasion to remove paint from a substrate. Typically, a compressed air stream is used to propel the media against the coated surface.

Electrostatic application means any method of coating application where an electrostatic attraction is created between the part to be coated and the atomized paint particles.

Equipment cleaning means the use of an organic solvent to remove coating residue from the surfaces of paint spray guns and other painting related equipment, including, but not limited to stir sticks, paint cups, brushes, and spray booths.

Facility maintenance means, for the purposes of this subpart, surface coating performed as part of the routine repair or renovation of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity. *Facility maintenance* also includes surface coating associated with the installation of new equipment or structures, and the application of any surface coating as part of janitorial activities. *Facility maintenance* includes the application of coatings to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of

installation, to pavements, or to curbs. *Facility maintenance* also includes the refinishing of mobile equipment in the field or at the site where they are used in service and at which they are intended to remain indefinitely after refinishing. Such mobile equipment includes, but is not limited to, farm equipment and mining equipment for which it is not practical or feasible to move to a dedicated mobile equipment refinishing facility. Such mobile equipment also includes items, such as fork trucks, that are used in a manufacturing facility and which are refinished in that same facility. *Facility maintenance* does not include surface coating of motor vehicles, mobile equipment, or items that routinely leave and return to the facility, such as delivery trucks, rental equipment, or containers used to transport, deliver, distribute, or dispense commercial products to customers, such as compressed gas canisters.

High-volume, low-pressure (HVLP) spray equipment means spray equipment that is permanently labeled as such and used to apply any coating by means of a spray gun which is designed and operated between 0.1 and 10 pounds per square inch gauge (psig) air atomizing pressure measured dynamically at the center of the air cap and at the air horns.

Initial startup means the first time equipment is brought online in a paint stripping or surface coating operation, and paint stripping or surface coating is first performed.

Materials that contain HAP or *HAP-containing materials* mean, for the purposes of this subpart, materials that contain 0.1 percent or more by mass of any individual HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4), or 1.0 percent or more by mass for any other individual HAP.

Military munitions means all ammunition products and components produced or used by or for the U.S. Department of Defense (DoD) or for the U.S. Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the National Nuclear Security Administration (NNSA), U.S. Department of Energy (DOE), and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DoD components, including bulk explosives and chemical warfare agents, chemical munitions, biological weapons, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, nonnuclear components of nuclear weapons, wholly inert ammunition products, and all devices and components of any items listed in this definition.

Miscellaneous parts and/or products means any part or product made of metal or plastic, or combinations of metal and plastic. Miscellaneous parts and/or products include, but are not limited to, metal and plastic components of the following types of products as well as the products themselves: motor vehicle parts and accessories for automobiles, trucks, recreational vehicles; automobiles and light duty trucks at automobile and light duty truck assembly plants; boats; sporting and recreational goods; toys; business machines; laboratory and medical equipment; and household and other consumer products.

Miscellaneous surface coating operation means the collection of equipment used to apply surface coating to miscellaneous parts and/or products made of metal or plastic, including applying cleaning solvents to prepare the surface before coating application, mixing coatings before application, applying coating to a surface, drying or curing the coating after application, and cleaning coating application equipment, but not plating. A single surface coating operation may include any combination of these types of equipment, but always includes at least the point at which a coating material is applied to a given part. A surface coating operation includes all other steps (such as surface preparation with solvent and equipment cleaning) in the affected source where HAP are emitted from the coating of a part. The use of solvent to clean parts (for example, to remove grease during a mechanical repair) does not constitute a miscellaneous surface coating operation if no coatings are applied. A single affected source may have multiple surface coating operations. Surface coatings applied to wood, leather, rubber, ceramics, stone,

masonry, or substrates other than metal and plastic are not considered miscellaneous surface coating operations for the purposes of this subpart.

Mobile equipment means any device that may be drawn and/or driven on a roadway including, but not limited to, heavy-duty trucks, truck trailers, fleet delivery trucks, buses, mobile cranes, bulldozers, street cleaners, agriculture equipment, motor homes, and other recreational vehicles (including camping trailers and fifth wheels).

Motor vehicle means any self-propelled vehicle, including, but not limited to, automobiles, light duty trucks, golf carts, vans, and motorcycles.

Motor vehicle and mobile equipment surface coating means the spray application of coatings to assembled motor vehicles or mobile equipment. For the purposes of this subpart, it does not include the surface coating of motor vehicle or mobile equipment parts or subassemblies at a vehicle assembly plant or parts manufacturing plant.

Non-HAP solvent means, for the purposes of this subpart, a solvent (including thinners and cleaning solvents) that contains less than 0.1 percent by mass of any individual HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) and less than 1.0 percent by mass for any other individual HAP.

Paint stripping and/or miscellaneous surface coating source or facility means any shop, business, location, or parcel of land where paint stripping or miscellaneous surface coating operations are conducted.

Paint stripping means the removal of dried coatings from wood, metal, plastic, and other substrates. A single affected source may have multiple paint stripping operations.

Painter means any person who spray applies coating.

Plastic refers to substrates containing one or more resins and may be solid, porous, flexible, or rigid. Plastics include fiber reinforced plastic composites.

Protective oil means organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils.

Quality control activities means surface coating or paint stripping activities that meet all of the following criteria:

(1) The activities associated with a surface coating or paint stripping operation are intended to detect and correct defects in the final product by selecting a limited number of samples from the operation, and comparing the samples against specific performance criteria.

(2) The activities do not include the production of an intermediate or final product for sale or exchange for commercial profit; for example, parts that are surface coated or stripped are not sold and do not leave the facility.

(3) The activities are not a normal part of the surface coating or paint stripping operation; for example, they do not include color matching activities performed during a motor vehicle collision repair.

(4) The activities do not involve surface coating or stripping of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity; that is, the activities are not facility maintenance.

Research and laboratory activities means surface coating or paint stripping activities that meet one of the following criteria:

(1) Conducted at a laboratory to analyze air, soil, water, waste, or product samples for contaminants, or environmental impact.

(2) Activities conducted to test more efficient production processes, including alternative paint stripping or surface coating materials or application methods, or methods for preventing or reducing adverse environmental impacts, provided that the activities do not include the production of an intermediate or final product for sale or exchange for commercial profit.

(3) Activities conducted at a research or laboratory facility that is operated under the close supervision of technically trained personnel, the primary purpose of which is to conduct research and development into new processes and products and that is not engaged in the manufacture of products for sale or exchange for commercial profit.

Solvent means a fluid containing organic compounds used to perform paint stripping, surface prep, or cleaning of surface coating equipment.

Space Vehicle means vehicles designed to travel beyond the limit of the earth's atmosphere, including but not limited to satellites, space stations, and the Space Shuttle System (including orbiter, external tanks, and solid rocket boosters).

Spray-applied coating operations means coatings that are applied using a hand-held device that creates an atomized mist of coating and deposits the coating on a substrate. For the purposes of this subpart, spray-applied coatings do not include the following materials or activities:

(1) Coatings applied from a hand-held device with a paint cup capacity that is equal to or less than 3.0 fluid ounces (89 cubic centimeters).

(2) Surface coating application using powder coating, hand-held, non-refillable aerosol containers, or non-atomizing application technology, including, but not limited to, paint brushes, rollers, hand wiping, flow coating, dip coating, electrodeposition coating, web coating, coil coating, touch-up markers, or marking pens.

(3) Thermal spray operations (also known as metallizing, flame spray, plasma arc spray, and electric arc spray, among other names) in which solid metallic or non-metallic material is heated to a molten or semi-molten state and propelled to the work piece or substrate by compressed air or other gas, where a bond is produced upon impact.

Surface preparation or *Surface prep* means use of a cleaning material on a portion of or all of a substrate prior to the application of a coating.

Target HAP are compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd).

Target HAP containing coating means a spray-applied coating that contains any individual target HAP that is an Occupational Safety and Health Administration (OSHA)–defined carcinogen as specified in 29 CFR 1910.1200(d)(4) at a concentration greater than 0.1 percent by mass, or greater than 1.0 percent by mass for any other individual target HAP compound. For the purpose of determining whether materials you use contain the target HAP compounds, you may rely on formulation data provided by the manufacturer or supplier, such as the material safety data sheet (MSDS), as long as it represents each target HAP compound in the material that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other target HAP compounds.

Transfer efficiency means the amount of coating solids adhering to the object being coated divided by the total amount of coating solids sprayed, expressed as a percentage. Coating solids means the nonvolatile portion of the coating that makes up the dry film.

Truck bed liner coating means any coating, excluding color coats, labeled and formulated for application to a truck bed to protect it from surface abrasion.

Table 1 to Subpart HHHHHH of Part 63—Applicability of General Provisions to Subpart HHHHHH of Part 63

Citation	Subject	Applicable to subpart HHHHHH	Explanation
§63.1(a)(1)–(12)	General Applicability	Yes	
§63.1(b)(1)–(3)	Initial Applicability Determination	Yes	Applicability of subpart HHHHHH is also specified in §63.11170.
§63.1(c)(1)	Applicability After Standard Established	Yes	
§63.1(c)(2)	Applicability of Permit Program for Area Sources	Yes	(63.11174(b) of Subpart HHHHHH exempts area sources from the obligation to obtain Title V operating permits.
§63.1(c)(5)	Notifications	Yes	
§63.1(e)	Applicability of Permit Program to Major Sources Before Relevant Standard is Set	No	(63.11174(b) of Subpart HHHHHH exempts area sources from the obligation to obtain Title V operating permits.
§63.2	Definitions	Yes	Additional definitions are specified in §63.11180.
§63.3(a)–(c)	Units and Abbreviations	Yes	
§63.4(a)(1)–(5)	Prohibited Activities	Yes	
§63.4(b)–(c)	Circumvention/Fragmentation	Yes	
§63.5	Construction/Reconstruction of major sources	No	Subpart HHHHHH applies only to area sources.
§63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability	Yes	
§63.6(b)(1)–(7)	Compliance Dates for New and Reconstructed Sources	Yes	§63.11172 specifies the compliance dates.
§63.6(c)(1)–(5)	Compliance Dates for Existing Sources	Yes	§63.11172 specifies the compliance dates.
§63.6(e)(1)–(2)	Operation and Maintenance	Yes	
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	No	No startup, shutdown, and malfunction plan is required by subpart HHHHHH.
§63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction	Yes	
§63.6(f)(2)–(3)	Methods for Determining Compliance	Yes	
§63.6(g)(1)–(3)	Use of an Alternative Standard	Yes	
§63.6(h)	Compliance With Opacity/Visible Emission Standards	No	Subpart HHHHHH does not establish opacity or visible emission standards.
§63.6(i)(1)–(16)	Extension of Compliance	Yes	
§63.6(j)	Presidential Compliance Exemption	Yes	
§63.7	Performance Testing	No	No performance testing is required by subpart HHHHHH.

Citation	Subject	Applicable to subpart HHHHHH	Explanation
	Requirements		
§63.8	Monitoring Requirements	No	Subpart HHHHHH does not require the use of continuous monitoring systems.
§63.9(a)–(d)	Notification Requirements	Yes	§63.11175 specifies notification requirements.
§63.9(e)	Notification of Performance Test	No	Subpart HHHHHH does not require performance tests.
§63.9(f)	Notification of Visible Emissions/Opacity Test	No	Subpart HHHHHH does not have opacity or visible emission standards.
§63.9(g)	Additional Notifications When Using CMS	No	Subpart HHHHHH does not require the use of continuous monitoring systems.
§63.9(h)	Notification of Compliance Status	No	§63.11175 specifies the dates and required content for submitting the notification of compliance status.
§63.9(i)	Adjustment of Submittal Deadlines	Yes	
§63.9(j)	Change in Previous Information	Yes	§63.11176(a) specifies the dates for submitting the notification of changes report.
§63.10(a)	Recordkeeping/Reporting—Applicability and General Information	Yes	
§63.10(b)(1)	General Recordkeeping Requirements	Yes	Additional requirements are specified in §63.11177.
§63.10(b)(2)(i)–(xi)	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS	No	Subpart HHHHHH does not require startup, shutdown, and malfunction plans, or CMS.
§63.10(b)(2)(xii)	Waiver of recordkeeping requirements	Yes	
§63.10(b)(2)(xiii)	Alternatives to the relative accuracy test	No	Subpart HHHHHH does not require the use of CEMS.
§63.10(b)(2)(xiv)	Records supporting notifications	Yes	
§63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations	Yes	
§63.10(c)	Additional Recordkeeping Requirements for Sources with CMS	No	Subpart HHHHHH does not require the use of CMS.
§63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in §63.11176.
§63.10(d)(2)–(3)	Report of Performance Test Results, and Opacity or Visible Emissions Observations	No	Subpart HHHHHH does not require performance tests, or opacity or visible emissions observations.
§63.10(d)(4)	Progress Reports for Sources With Compliance Extensions	Yes	
§63.10(d)(5)	Startup, Shutdown, and Malfunction Reports	No	Subpart HHHHHH does not require startup, shutdown, and malfunction reports.
§63.10(e)	Additional Reporting requirements for Sources with CMS	No	Subpart HHHHHH does not require the use of CMS.

Citation	Subject	Applicable to subpart HHHHHH	Explanation
§63.10(f)	Recordkeeping/Reporting Waiver	Yes	
§63.11	Control Device Requirements/Flares	No	Subpart HHHHHH does not require the use of flares.
§63.12	State Authority and Delegations	Yes	
§63.13	Addresses of State Air Pollution Control Agencies and EPA Regional Offices	Yes	
§63.14	Incorporation by Reference	Yes	Test methods for measuring paint booth filter efficiency and spray gun transfer efficiency in §63.11173(e)(2) and (3) are incorporated and included in §63.14.
§63.15	Availability of Information/Confidentiality	Yes	
§63.16(a)	Performance Track Provisions—reduced reporting	Yes	
§63.16(b)–(c)	Performance Track Provisions—reduced reporting	No	Subpart HHHHHH does not establish numerical emission limits.