

Mission:
To protect, promote & improve the health
of all people in Florida through integrated
state, county & community efforts.



Rick Scott
Governor

John H. Armstrong, MD, FACS
State Surgeon General & Secretary

Vision: To be the Healthiest State in the Nation

January 15, 2015
Electronic Correspondence
steven.austin@psm.com

NOTICE OF AIR POLLUTION OPERATION PERMIT RENEWAL

Power Systems Mfg., LLC.
1440 West Indiantown Road
Jupiter, FL 33458

ARMS No.	0990687
Air Permit No.	0990687-003-AO
Issued:	01/15/2015
Expires:	01/14/2020

Authorized Representative:

Steven Austin, EHS Product Line GTOEM

Project: Air Permit Renewal for Permit No. 0990687-002-AO and to add miscellaneous insignificant activities.

Dear Mr. Austin:

Enclosed is [Air Permit No. 0990687-003-AO](#) for the operation of a source of air pollution located in Palm Beach County. This air permit renewal is issued pursuant to Chapter 403.087 of the Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code.

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 Florida Department of Health Palm Beach County (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 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.).

A person whose substantial interests are affected by the Department's permitting decision may petition for an administrative hearing in accordance with sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Palm Beach County Health Department Legal Office, located at 800 Clematis Street in West Palm Beach, Florida, 33401 (Telephone: (561) 671-4000, Fax (561) 837-5195). Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this final permit. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
- (c) A statement of how and when each petitioner received notice of the agency action or proposed action;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and,
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

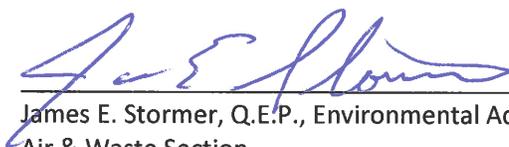
A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this final permit. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available for this action.

Any party to this Order (Permit) has the right to seek judicial review pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure with the Health Department at the address listed below 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 from the date this Order (Permit) is filed with the Clerk of the Health Department.

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


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

If you have any questions, contact:
Laxmana Tallam, PE,
Permitting Supervisor
Air & Solid Waste Section
Department of Health Palm Beach County
P.O. Box 29 (800 Clematis St.)
West Palm Beach, Florida, 33402-0029

CERTIFICATE OF SERVICE

The undersigned duly designated agency clerk hereby certifies that the Notice of Air Pollution Operation Permit Renewal and the Final Air Permit Renewal were sent by electronic mail (with received receipt) before the close of business on 11/15/15 to the permittee.

In addition, the undersigned duly designated deputy agency clerk hereby certifies that *copies* of these documents were sent by electronic mail (with received receipt) on the same date to the following persons:

Diane Pupa
Air Program, Southeast District Office
3301 Gun Club Road, MSC 7210-1
West Palm Beach, FL 33406
Diane.Pupa@dep.state.fl.us

Brian Pietrzyk - Facility Manager
Power Systems Mfg., LLC
1440 West Indiantown Road
Jupiter, FL 33458
Brian.Pietrzyk@psm.com

Geon Gordon – Program Lead, EH&S
Power Systems Mfg., LLC.
1440 West Indiantown Road
Jupiter, FL 33458
Geon.Gordon@psm.com

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), F.S., with the designated agency Clerk, receipt of which is hereby acknowledged.

Paul Halamaras
(Clerk)

11/15/15
(Date)

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AIR POLLUTION OPERATION PERMIT RENEWAL

ISSUED TO:

Power Systems Mfg., LLC
1440 Indiantown Road
Jupiter, Florida 33458

Authorized Representative:

Steven Austin, EHS Product Line GTOEM

ARMS No.	0990687
Air Permit No.	0990687-003-AO
Issued:	01/15/2015
Expires:	01/14/2020

LOCATED AT: 1440 West Indiantown Road, Jupiter, FL 33458

Project Description: This permitting action is to renew Permit No. 0990687-002-AO and to add exempt/insignificant activities.

UTM: Zone 17; 587.24 km E; 2979.25 km N; 26° 55' 56.72" North / Longitude: 80° 07' 16.61" West

SIC No: 8711; Engineering Services

NAICS: 541330; Engineering Services

STATEMENT OF BASIS:

The Florida Department of Health Palm Beach County (Health Department) issues this permit under the provisions of Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4 through 62-297 the Florida Administrative Code (F.A.C.). The Florida Department of Environmental Protection (DEP) has permitting jurisdiction under Chapter 403.087, F.S. However, in accordance with Section 403.182, F.S., the DEP recognizes the 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 for this type of air pollution source located in Palm Beach County. The above named permittee is authorized to operate the facility 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

FLORIDA DEPARTMENT OF HEALTH PALM BEACH COUNTY

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

Florida Department of Health

Palm Beach County, Division of Environmental Public Health
P.O. Box 29, 800 Clematis Street, West Palm Beach, FL 33402
PHONE: 561-837-5900 • FAX : 561-837-5294

www.FloridasHealth.com

WITTER:HealthyFLA
FACEBOOK:FLDepartmentofHealth
YOUTUBE: fldoh

SECTION II. FACILITY WIDE CONDITIONS**PERMIT HISTORY**

11/24/14: Received application for renewal of Permit No. 0990687-002-AO and to add other miscellaneous exempt/Insignificant activities

RULE APPLICABILITY

This facility is located in Palm Beach County, an area designated as "maintenance" for the pollutant ozone and attainment for all other criteria pollutants in accordance with Rule 62-204.340, F.A.C. The facility is not subject to review under Rule 62-212.400 F.A.C., Prevention of Significant Deterioration (PSD), because this new source is considered "minor" for the purpose of PSD regulations (having a potential to emit less than 250 tons per year of pollutant). The facility is subject to the following air pollution control provisions:

- F.A.C. Chapter 62-4 - Permitting Requirements.
- F.A.C. Chapter 62-204 - Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference.
- F.A.C. Chapter 62-210 - Required Permits, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms.
- F.A.C. Chapter 62-212 - General Preconstruction Review Requirements, PSD Requirements.
- FF.A.C. Rule 62-296 - General Pollutant Emission Limiting Standards.
- F.A.C. Rule 62-297 - Test Methods.
- F.A.C. Chapter 62-256 - Open Burning and Frost Protection Fires.

PERMIT CONTENT

- Section I: Summary Information.
- Section II: Facility-Wide Specific Conditions.
- Section III: Emissions Unit Specific Conditions.
- Section IV: Appendices.
 - [Appendix A](#): General Permit Conditions.
 - [Appendix B](#): Abbreviations, Acronyms, Citations, and Identification Numbers
 - [Appendix C](#): General Testing Requirements (Chapter 62-297, F.A.C.)
 - [Appendix D](#): List of Insignificant and Exempt Activities

This permitting action is to renew Permit No. 0990687-002-AO and to add exempt/insignificant activities. The facility has an existing Hydrogen Chloride (HCL) chemical stripper which is used to remove material from gas turbine parts prior to refurbishing.

The facility is permitted as a synthetic minor source for Hydrogen Chloride (HCL). Based on the permit application, this facility is not a major source of hazardous air pollutants (HAPs).

Emissions Unit List

EU ID No.	Status	Brief Description
001	Regulated	Chemical stripping plant equipped with an Alkaline fume Scrubber.
---	Exempt	Hydrofluoric ion Cleaning System with an Alkaline Wet Bed Scrubber
---	Exempt	100 KW and 150 KW Emergency Generator

SECTION II. FACILITY WIDE CONDITIONS**1.0 ADMINISTRATIVE REQUIREMENTS**

- 1.1 Regulating Agencies: All applications, reports, tests, and notifications shall be submitted to the Air and Waste Section of the Florida Department of Health Palm Beach County (Health Department) at P.O. Box 29 (800 Clematis Street), West Palm Beach, Florida, 33402-0029, and phone number (561) 837-5900. **[Specific Operating Agreement – SOA]**
- 1.2 General Permit Conditions: The owner and operators shall be aware of, and operate under, the attached General Permit Conditions listed in **Appendix A** of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. **[Rule 62-4.160, F.A.C.]**
- 1.3 Insignificant and Exempt: List of insignificant and exempt activities is included in **Appendix D** and is a part of this permit. **[Rule 62-210.300(3)(a), 62-210.300(3)(b) F.A.C. and request of applicant].**
- 1.4 Citation Format: The format for citing applicable regulations is provided in **Appendix B** of this permit.
- 1.5 Application for Operation Permit: The permittee shall apply for a renewal permit at least 60 days prior to the expiration of this operation permit. The application shall include: the Application Form **[DEP Form No. 62-210.900(4)]**; the correct application processing fee; all required test reports; and a summary of any changes or substitutions to the original equipment, processes, fuels, controls, etc. When the renewal application is timely and sufficient, the existing permit shall remain in effect until final action is taken by the Health Department. **[Rules 62-4.090 and 62-210.900, F.A.C.]**
- 1.6 Applicable Regulations: This facility is subject to the following regulations: Chapters 62-4, 62-210, 62-212, 62-296, and 62-297, F.A.C. 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]**

2.0 EMISSION LIMITING AND PERFORMANCE STANDARDS

- 2.1 General VOC Standards: The owner or operator shall not store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents without applying known and existing vapor emission control devices or systems. This includes: **[Rule 62-296.320(1), F.A.C.]**
- Regular inspection and maintenance of piping, valves, flanges, tanks, and containers used for storage and transfer of organic liquids in order to minimize fugitive VOC emissions.
 - When not in use, directing solvent-containing materials to containers that prevent evaporation.
- 2.2 Objectionable Odors: No person shall 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(200), F.A.C.]*
- 2.3 General Visible Emissions Standard: Unless otherwise specified by permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere any air pollutants from new, or existing emissions units, the opacity of which is equal to or greater than 20 percent. **[Rule 62-296.320(4)(b), F.A.C.]**
- 2.4 Unconfined Emissions of Particulate Matter: No person shall 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 include the following: **[Rule 62-296.320(4)(c), F.A.C.]**
- Paving and maintenance of roads, parking areas and yards.
 - Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
 - Application of asphalt, water, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
 - 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.
 - Landscaping or planting of vegetation.
 - Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.

SECTION II. FACILITY WIDE CONDITIONS

- Confining abrasive blasting where possible.
- Enclosure or covering of conveyor systems.

Note: Facilities that cause frequent, valid complaints will be required by the Health Department to take these or other reasonable precautions. In determining what constitutes reasonable precautions for a particular facility, the Health Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

3.0 OPERATION AND MAINTENANCE REQUIREMENTS

- 3.1 Circumvention: The owner or operator 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 **[Rule 62-210.700, F.A.C.]**
- (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 owner or operator 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.]**

4.0 COMPLIANCE MONITORING REQUIREMENTS

- 4.1 Duration: Unless otherwise specified, 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 shall meet all applicable requirements of the Chapter 62-297, F.A.C. See **Appendix C** of this permit for a summary of these requirements. **[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 Test Notification: The owner or operator shall notify the Health Department, in writing, at least 15 days prior to the date on which each formal compliance test is to begin, 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 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.]**
- 4.5 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.]**

SECTION II. FACILITY WIDE CONDITIONS**5.0 REPORTS REQUIRED**

- 5.1 Annual Operations Report: The annual operating report shall be submitted to the Health Department by April 1 of the following year. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to the Health Department. **[Rule 62-210.370(3)(c), F.A.C.]**
- 5.2 Excess Emissions Report: If excess emissions occur, the owner or operator shall notify the Air Compliance Section of the Health Department within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Health Department may request a written summary report of the incident. **[Rules 62-4.130 and 62-210.700(6), F.A.C.]**
- 5.2 Emission Compliance 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.]**

6.0 WASTE REQUIREMENTS

- 6.1 Waste Disposal: The owner or operator shall treat, store, and dispose of all liquid, solid, and hazardous wastes in accordance with all applicable Federal, State, and Local regulations. This air pollution permit does not preclude the permittee from securing any other types of required permits, licenses, or certifications.

SECTION III. EMISSIONS SPECIFIC UNIT CONDITIONS**GROUP A. This portion of the permit addresses the following group of emissions unit:**

EU ID No	Status	Brief Description
001	Regulated	<p>Chemical Stripper (Model No. PT506-49S) operating with an Alkaline Scrubber</p> <p>The chemical stripper will serve to remove previous metallic coatings on turbine components. This process uses hydrogen chloride (HCl) and caustic soda (NaOH) solutions.</p> <p>The emissions of HCl are controlled by an alkaline scrubber manufactured by DUALL division (or equivalent). The scrubber operates at 6000 cfm, 8-9.5 pH, and recycles NaOH/H₂O as scrubbing liquid at a rate of 52-75 gallons per hour.</p>

OPERATING RESTRICTIONS

III.A.1 Methods of Operation: The permittee shall not allow, cause, suffer or permit any change in the method(s) of operation resulting in increased emissions, without prior authorization from the Permitting Authority. **[Permit No. 0990687-001-AC]**

III.A.2 Permitted Capacity. The permittee shall not allow, cause, suffer or permit the operation of the emission unit in excess of the following without prior authorization from the Permitting Authority:

- Four (4) HCl tanks with a surface area of 16.11 ft² (each).

[Permit No. 0990687-001-AC]

{Permitting Note: Based on the number & size of the tanks and 8760 hrs of operation per year, the estimated uncontrolled emissions of HCL are 19.4 tons per year. The estimated controlled emissions of HCL are 0.194 tons per year based on the 99% control efficiency.}

III.A.3 Hours of Operation: The emission unit is allowed to operate continuously.
[Permit No. 0990687-001-AC]

COMPLIANCE MONITORING

III.A.4 stripping operations: The owner or operator shall operate the stripping plant as per the manufacturer's specifications. The operation plan of the plant and the scrubber shall be available to operators at all times.
[Permit No. 0990687-001-AC]

III.A.5 Alkaline Scrubber: The owner or operator shall operate the alkaline scrubber according to the manufacturer's specification in order to achieve the design control efficiency. **[Permit No. 0990687-001-AC]**

III.A.6 Operation and Maintenance Plan (O&M plan): The permittee shall maintain an O&M plan that shall be available for operators. The plan shall include a schedule for the maintenance and inspection of the scrubber and schedule for recording performance parameters of the scrubber. The records of inspection, maintenance and performance data of the scrubber shall be retained by the permittee for a minimum of three years and shall be made available to the Health Department upon request.
[Permit No. 0990687-001-AC]

The performance parameters shall include, but may not be limited to the following indicators:

- Scrubber pH reading (Operating Limit >1)
- Neutralization pH Reading (Discharge Limit 5.5 – 9.5)
- Recycle Pump Discharge Pressure (lb/in²) (Operating Limit 18 PSI +/- 2 psi)
- Make-Up rate (gal/hr) (Operating Limit 16 - 28)
- Packed Bed Differential Pressure ("W.C.) (Operating Limit 2.5 +10%)
- Mist Eliminator Differential Pressure ("W.C.) (Operating Limit 3 + 10%)
- Air Flow Rate (ft³/min) (Operating @6000 CFM)
- NaOH Usage
- HCl usage

[Permit No. 0990687-001-AC, and Rule 62-4.070(3), F.A.C.]

SECTION III. EMISSIONS SPECIFIC UNIT CONDITIONS

III.A.7 Control Equipment Data: The O&M Plan shall include the identification of the scrubber including, but not limited to the following design specifications:

- Manufacturer
- Model name and number
- Design flow rate (liquid and/or gas)
- Efficiency rating at design capacity
- Pressure drop
- Scrubbing liquor composition.

[Permit No. 0990687-001-AC]

REPORTING AND RECORDKEEPING REQUIREMENTS

III.A 8 Record Keeping Requirements: The facility shall keep records of the following and shall make them available to the Health Department upon request.

- Daily operating hours of the plant
- Inspection records of the plant and scrubber
- Total quantity of acid used in the system
- Daily Monitoring parameters for the scrubber

[Permit No. 0990687-001-AC]

SECTION III. EMISSIONS SPECIFIC UNIT CONDITIONS

GROUP B. This portion of the permit addresses the following Exempt emission unit:

Status	Brief Description
EXEMPT	<p>Hydrofluoric Acid - HF Cleaning System</p> <p>Complete Hydrofluoric Acid Cleaning System which will be used for parts cleaning.</p> <p>This entire process uses Alkaline Wet Packed bed scrubber. Room equipped with Ammonia neutralization system. The HF emissions are controlled by an Alkaline wet packed bed scrubber. The total process flow rate is 1060 ft³/hr at standard atmospheric temperature and pressure. The scrubber efficiency is 99.995%.</p>

OPERATING RESTRICTIONS

III.B.1 Permitted Capacity. The permittee shall not allow, cause, suffer or permit the operation of the emission unit in excess of the following without prior authorization from the Permitting Authority:

- One (1) HF tank with a Retort Diameter of 50 inches and Hot Zone Height of 40 inches, overall insight height of 60 inches.

{Permitting Note: The HF process is a complete system with the scrubber assuming 8760 hours of operation per year the estimated controlled emissions of HCL is 0.00015 tons per year based on the 99.995% control efficiency. The scrubber is an integral part of the design and in the event of a failure of the scrubber or a HF leak, the system will automatically shutdown scrubber and stop the HF flowing to the scrubber.}

III.B.2 Hours of Operation: The emission unit is allowed to operate continuously.
[Rule 62-4.070(3), F.A.C.]

COMPLIANCE MONITORING

III.B.3 Hydrogen Fluoride cleaning operations: The owner or operator shall operate the alkaline scrubber as per the manufacturer's specifications. The operation plan of the plant and the scrubber shall be available to operators at all times. [Rule 62-4.070(3), F.A.C.]

REPORTING AND RECORDKEEPING REQUIREMENTS

III.B.4 Record Keeping Requirements: The facility shall keep records of the following and shall make them available to the Health Department upon request.

- Daily operating hours of the emissions unit
- Inspection records of the emissions unit and scrubber
- Total quantity of acid used in the system
Details of the scrubber maintenance

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

SECTION III. EMISSIONS SPECIFIC UNIT CONDITIONS
GROUP C. This portion of the permit addresses the following Exempt emission unit:

Status	Brief Description
EXEMPT	- 150kw Emergency Generator - 100kw Emergency Generator

The 150 KW and 100 KW Emergency Generator for the facility are designated as existing engines under 40 CFR Part 63 Subpart ZZZZ.

III.C.1. NESHAP Subpart ZZZZ: The generators at the facility are subject to the applicable Requirements of 40 CFR Part 63 Subpart ZZZZ 'National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines' (RICE) Regulations. The facility shall comply with Subpart ZZZZ. **[40 CFR 63 Subpart ZZZZ]**

III.C.2. NSPS Subpart IIII: New generators with displacement of less than 30 liters per cylinder that were manufactured in 2007 or later are subject to 40 CFR Part 60, Subpart IIII – 'Standards of Performance for Stationary Compression Ignition Internal Combustion Engines'. **[40 CFR 60 Subpart IIII]**

III.C.3. Fuel Usage: The facility shall comply with the following usage limits in order to maintain the permit exemption status for the emission sources. **[Rules 62-4.070(3), and 62-210.300, F.A.C.]**

- (a) **Emergency Generators:** Total fuel by all generators shall not exceed 5,400 gallons of gasoline, 64,000 gallons of diesel fuel, 288,000 gallons of propane, or 8.8 million standard cubic feet of natural gas. **[Rule 62-210.300(3)(a)35 & 36 F.A.C.]**
- (b) **Emergency Generators:** Beginning October 1, 2010, owners and operators of stationary CI ICE subject to 40 CFR Part 63 Subpart ZZZZ with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b), non-road ultra-low sulfur diesel fuel. **[Rule 40 CFR 60.4207(b)]**
- (c) The permittee is authorized to use only diesel fuel that meets the following requirements of 40 CFR 80.510(b). **[40 CFR 63.6604]**
 - (1) Maximum Sulfur content of 15 ppm.
 - (2) Cetane index or aromatic content, as follows:
 - (i) A minimum cetane index of 40; or
 - (ii) A maximum aromatic content of 35 volume percent.

III.C.4. Operating Requirements for the Generators: The generators must meet the following requirements, except during periods of startup. **[40 CFR 63.6603(a) and Table 2d of Subpart ZZZZ]**

- (a) Change oil and filter every 500 hours of operation or annually, whichever comes first¹;
- (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.
- (d) During periods of startup the facility must 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. **[40 CFR 63.6625(h)]**

{Note: 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 in Section III, C.5. of this permit, 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 best management practices 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.}

SECTION III. EMISSIONS SPECIFIC UNIT CONDITIONS

- III.C.5. Monitoring Requirements for emergency generators:** The owner or operator shall develop the operating and maintenance logs and records and shall comply with the requirements as prescribed below.
- (a) The facility must comply with emission limitations and operating limitations, and must operate and maintain the emergency generators and fire pump engines, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction. **[40 CFR 63.6605(b)]**
 - (b) The facility must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **[40 CFR 63.6625(e) and Rule 40 CFR 60.4211(a)]**
 - (c) The emergency stationary RICE with a site rating [maximum manufacturer's design capacity at engine site conditions] of less than or equal to 500 brake HP **shall be installed with a non-resettable hour meter if one is not already installed.** **[Rule 40 CFR 63.6625(f) and Rule 40 CFR 60.4209(a)]**
- III.C.6. Records:** The permittee shall maintain records of the following:
- (a) **Emergency Generators:** The permittee shall maintain sufficient documentation to demonstrate compliance with the fuel usage limit according to **specific conditions III.C.3** of this permit.
 - (b) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment. **[40 CFR 63.6655(a)(2)]**
 - (c) Records of all required maintenance performed on the air pollution control and monitoring equipment. **[40 CFR 63.6655(a)(4)]**

The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to facility's maintenance plan. **[40 CFR 63.6655(e)]**

LIST OF APPENDICES

APPENDIX	DESCRIPTION
A	General Permit Conditions [F.A.C. 62-4.160]
B	Citation Format
C	Summary of General Testing Requirements (Chapter 62-297, F.A.C.)
D	List of Insignificant and Exempt Activities

SECTION IV. APPENDIX A
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- 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.
 - (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.
 - (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.

SECTION IV. APPENDIX A
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- 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. *(Not Applicable)*
 - (b) Determination of Prevention of Significant Deterioration. *(Not Applicable)*
 - (c) Compliance with New Source Performance Standards. *(Not Applicable)*
- 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.
 - 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.

SECTION IV. APPENDIX B

CITATION FORMAT

CITATION FORMAT

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

Guidance Memorandums from the Bureau of Air Regulation, Florida Department of Environmental Protection:

Example: **[DARM-PER/GEN-12]** (Refers to a specific, numbered guidance memorandum.)

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

Example: **[F.A.C. 62-4.070]**

Where: 62 - Title 62
62-4 - Chapter 62-4
62-4.070 - Rule 62-4.070

Code of Federal Regulations:

Example: **[40 CFR 60.334]**

Where: 40 - Title 40
CFR - Code of Federal Regulations
60 - Part 60
60.334 - Rule 60.334

New Permit Numbers:

Example: 099-0333-002-AC, or
099-0333-001-AO

Where: AC - Air Construction Permit
AO - Air Operation Permit
099 - Number code identifying the facility is located in Palm Beach County
0333 - 4-digit facility identification number assigned by permit tracking database
001 or 002 - 3-digit sequential file number assigned by permit tracking database

Old Air Permit Numbers:

Example: AC50-123456

Where: AC - Air Construction Permit
AO - Air Operation Permit
123456 - 6-digit sequential file number assigned by permit tracking database.

SECTION IV. APPENDIX C
Summary of General Testing Requirements (Chapter 62-297, F.A.C.)

GENERAL COMPLIANCE TEST REQUIREMENTS (RULE 62-297.310, F.A.C.)

The focal point of a compliance test is the stack or duct, which vents process and/or combustion gases and air pollutants from an emissions unit into the ambient air.

- (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 the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20% below the allowable emission limiting standard.
- (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 impracticable 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.
 - (a) Combustion Turbines. (Reserved)
 - (b) All Other Sources. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit.
- (3) 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.
- (4) Applicable Test Procedures.
 - (a) Required Sampling Time.
 1. 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.
 2. 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.
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
 - (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - (c) 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.
 - (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

SECTION IV. APPENDIX C
Summary of General Testing Requirements (Chapter 62-297, F.A.C.)

- (e) 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.

TABLE 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	Micrometer	+/-0.001" men of at least three readings
	Max. deviation between readings	0.004"	
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually	Spirometer or calibrated wet test or dry gas test meter	2%
	2. One Point: Semiannually		
	3. Check after each test series	Comparison check	5%

(5) Determination of Process Variables.

- (a) 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.
- (b) 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.

SECTION IV. APPENDIX C

Summary of General Testing Requirements (Chapter 62-297, F.A.C.)

(6) 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 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.

(b) 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 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 Department.

(c) 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

SECTION IV. APPENDIX C

Summary of General Testing Requirements (Chapter 62-297, F.A.C.)

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 paragraph 62-297.310(7)(b), F.A.C., shall apply.

(7) Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.

(b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.

(c) 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:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. 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.
5. 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.
6. 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.
7. 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.
8. The date, starting time and duration of each sampling run.
9. 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.
10. The number of points sampled and configuration and location of the sampling plane.
11. 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.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. 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.

Specific Authority 403.061 FS. Law Implemented 403.031, 403.061, 403.087 FS. History—Formerly 17-2.700(1)(b), 17-297.310, Amended 11-23-94, 3-13-96, 10-28-97, 3-2-99.

62-297.620 EXCEPTIONS AND APPROVAL OF ALTERNATE PROCEDURES AND REQUIREMENTS.

(1) 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.

(2) 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.

SECTION IV. APPENDIX C
Summary of General Testing Requirements (Chapter 62-297, F.A.C.)

(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.

(3) 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.

(4) In the case of an emissions unit which has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse, the Secretary or the appropriate Director of District Management may waive any particulate matter compliance test requirements for such emissions unit specified in any otherwise applicable rule, and specify an alternative standard of 5% opacity. The waiver of compliance test requirements for a particulate emissions unit equipped with a baghouse, and the substitution of the visible emissions standard, shall be specified in the permit issued to the emissions unit.

If the Department has reason to believe that the particulate weight emission standard applicable to such an emissions unit is not being met, it shall require that compliance be demonstrated by the test method specified in the applicable rule.

Specific Authority: 403.061, FS.

Law Implemented: 403.021, 403.031, 403.061, 403.087, FS.

HISTORY: FORMERLY 17-2.700 (3); AMENDED 6-29-93; FORMERLY 17-297.620; AMENDED 11-23-94.

SECTION IV. APPENDIX D
List of Insignificant and Exempt Activities

EXEMPT/INSIGNIFICANT <i>Miscellaneous operations and activities</i>	
<ul style="list-style-type: none"> - Parts Cleaner/Aqueous Chemical Stripping - High Velocity Oxy gen Fuel (HVOF) coating booth/Plasma metal parts coating - Electric Plasma (EPS) Coating Booth/Plasma metal parts coating - Braze Room(s)/parts cleaning - Heat Treatment Oven(s)/parts heat treating - Ultrasonic cleaning line dryer section/parts cleaning - Industrial Aqueous Parts Washer/parts cleaning - RECO Area Grinding side/metal inert gas (MIG) parts welding - Parts Benching belting and grinding operations - Grit Blasting room, booths and Blast Cabinet/abrasive parts blasting - Graystone Robotic Grit Blaster/robotic abrasive blaster - Lance Walk-in Blast booth/abrasive parts blasting - MET Lab hood and cut off saw/parts testing, and inspection - Main MET Lab Hoods and polisher/parts testing and inspection - Clemco blast cabinet/abrasive parts and blasting - Selective laser melting (SLM) machine/parts and welding repair. - SLM Benchtron/parts grinding and belting operations - Downdraft Table FS/MIG welding parts. - Empire Walk-in Blast booth/abrasive parts and blasting 	<ul style="list-style-type: none"> - Clemco Blast Cabinet/abrasive parts blasting - RECO #1 & 2/parts and grinding and belting operations - Hoffmann Grinder with Torit/parts grinding - Coating Area A & B/parts benching, grinding and belting operations - Heat treatment oven(s)/parts heat treating (Beavermatic) - Trinco blast cabinet/abrasive parts blasting - FPI Inspection Booth(s) man cooler fan exhaust/parts inspection - Vacuum Pump Exhaust #SF73 small 3" PVC/parts heat treating - Vacuum Pump Exhaust #SF103 small 3" PVC/parts heat treating - Blast Cabinet/abrasive parts blasting - RECO area(s) machine shop side/metal inert gas (MIG) parts welding - RECO FPI line dryer/parts inspection - FPI Spray booths/parts inspection - FSS Welding area(s)/MIG welding parts. - Airfoils area/parts benching and grinding - Compressed air chamber/parts testing - Benching/parts grinding and belting operations - FPI Inspection Booth(s) man cooler fan exhaust (B) &(C)/parts inspection - Compressed air/ R&D flow room/parts testing - Acetone/Laser R&D laboratory/parts testing - Miscellaneous tanks - Fuel Storage Tanks for Generators

Kalamaras, Paul T

From: EPOST_AIR_SED@dep.state.fl.us
Sent: Monday, November 24, 2014 5:31 PM
To: geon.gordon@psm.com
Cc: Kalamaras, Paul T; DL CHD50 EPost Air; EPOST_AIR_SED@dep.state.fl.us
Subject: RENEWAL APPLICATION NO. 0990687-003-AO, PSM/JUPITER

Dear Applicant:

Our office has received the air pollution permit application that you submitted for the project described below:

Facility Owner/Company Name: POWER SYSTEMS MFG., LLC
Site Name: PSM/JUPITER
Project Name: OPERATING PERMIT RENEWAL
Project Description: Air Operating Permit renewal for 0990687-002-AO.
Application Project No: 0990687-003-AO
Application Received Date: 11/24/2014
Permit Application Processor: Paul Kalamaras
Permit Application Processor Phone: 561-837-5900
Permit Application Processor Email: paul.kalamaras@flhealth.gov

We will review the application in a timely manner and contact you soon if any additional information is needed in order to process it. To avoid formal written requests for additional information, we encourage our permit processors to contact you directly by e-mail or by phone to resolve any questions or provide missing information. Our goal is to reduce the overall time required to process your application. We appreciate your efforts to help us meet this goal by ensuring that your response to any of our questions is timely, thorough and complete. If no additional information is required from you to process the application, we will be sending you a draft of the permit for your review and comment.

If you did not include a full payment for this application's fees and would like to make an online payment for the outstanding balance, please visit the DEP Business Portal - <https://www.fldepportal.com> - and complete the online payment process for a submitted application. Please note that the following fee types may not be completed through this process:

- * Payments for annual fees
- * Payments for non-Title V Air General Permits
- * Payments processed by a local delegated program
- * Partial payments for application balances

If you have any questions, or if you received this email in error, please contact the Permit Application Processor listed above by phone or e-mail. You may also schedule a meeting or teleconference with the Permit Application Processor at any time during the application review process.

Best Regards,

Department of Health Palm Beach County
Division of Public Health/Air and Waste Program
800 Clematis Street, Fourth Floor
P.O. Box 29
West Palm Beach, FL 33401

Tel. 561-837-5900

Please do not reply to this auto-generated email.

ARMS FACILITY ROLE(S):

ARMS FACILITY OFFICE IS:- SEPB; PA PERMITTING OFFICE IS:- SEPB [Dep Customer Survey]<http://survey.dep.state.fl.us/?refemail=EPOST_AIR_SED@dep.state.fl.us>

<Laxmana_Tallam
@doh.state.fl.us>

To Geon Gordon/USJPT01/Power/ALSTOM@GA

cc <Paul_Kalamaras@doh.state.fl.us>

bcc

05/05/2010
02:26 PM

Subject EXEMPTION_PSM FIC permit

History:  This message has been forwarded.

Based on the facts as presented, the Health Department concurs that Rule 62-210.300(3)(b), F.A.C. exempts such emission units from air permitting requirements.

Please let me know if you have any questions.

~Laxmana Tallam

From: geon.gordon@psm.com [mailto:geon.gordon@psm.com]

Sent: Friday, April 30, 2010 3:20 PM

To: Tallam, Laxmana

Cc: Kalamaras, Paul T

Subject: re: PSM FIC permit

Good day Mr Tallam,

Please review letter below and contact me if additional information is required.

Thanks.

The logo for PSM (Public Service of Michigan) features the letters "PSM" in a bold, blue, sans-serif font. To the right of the letters is a stylized yellow graphic element that resembles a vertical bar or a partial arch.

The logo for PSM (Public Safety Management) features the letters "PSM" in a bold, blue, sans-serif font. To the right of the text is a stylized yellow graphic consisting of three curved lines that resemble a flag or a signal.

Mrs. Geon Gordon
EHS Coordinator
1440 West Indiantown Road, Suite 200
Jupiter, Fl 33458
Phone: 561-354-1179
Mobile: 561-452-5625, ggordon@psm.com

For up-to-date information about H1N1 Swine Flu visit <http://www.myflusafety.com> or call 877 352

From: Tallam, Laxmana [<mailto:Laxmana.Tallam@flhealth.gov>]
Sent: Friday, January 09, 2015 12:34 PM
To: GORDON Geon
Cc: Kalamaras, Paul T
Subject: RE: FIC except given in 05-2010

I can't open the attachment.

From: GORDON Geon [<mailto:geon.gordon@psm.com>]
Sent: Friday, January 09, 2015 12:30 PM
To: Tallam, Laxmana
Subject: FIC except given in 05-2010
Importance: High

Please see email of prior discussion regarding HF and FIC and except.

Geon Gordon
EHS Program Lead
1400 West Indiantown Road
Jupiter, FL 33458
Office: 561-354-1179
Cell: 305-965-8445

Fax: 561-354-4699

CONFIDENTIALITY : This e-mail and any attachments are confidential and may be privileged. If you are not a named recipient, please notify the sender immediately and do not disclose the contents to another person, use it for any purpose or store or copy the information in any medium.

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Laxmana Tallam, P.E.
Palm Beach County Health Department
800 Clematis Street
West Palm Beach, FL 33402
ph: 561-837-5978

Dear Sir,

Our facility in Jupiter will be installing a Fluoride Ion Cleaning System process. The system uses Hydrogen Fluoride HF-(Hydrofluoric acid –CAS 7664-39-3) which is listed on "The Clean Air Act Amendments of 1990 List of Hazardous Air Pollutants"

PSM will not apply for a *construction or operating permit* for this unit since the proposed installation will not cause the issuance of air or water contaminants in sufficient quantity. The FIC system is fully automated, has controls in place to detect leaks in the system, display leaks location and also has various levels of alarms which will indicate defaults in the system. Based on these controls, we believe that the FIC unit would **neither emit nor have the potential to emit:**

- (I) 500 pounds per year or more of lead and lead compounds expressed as lead;
- (II) 1,000 pounds per year or more of any hazardous air pollutant;
- (III) 2,500 pounds per year or more of total hazardous air pollutants; or
- (IV) 5.0 tons per year or more of any other regulated pollutant.

During a normal operating cycle the HF gas will pass through an alkaline scrubber which will reduce the concentration of gas in the vapor stream. This is done before the vapor is discharged to the atmosphere. Our best estimate, assuming operating for the entire year gives us a controlled exhaust of 0.00015 t/year. This is outlined in the schematic below.

In the unlikely event the scrubber fails or if an HF leak occurs, the following will happen:

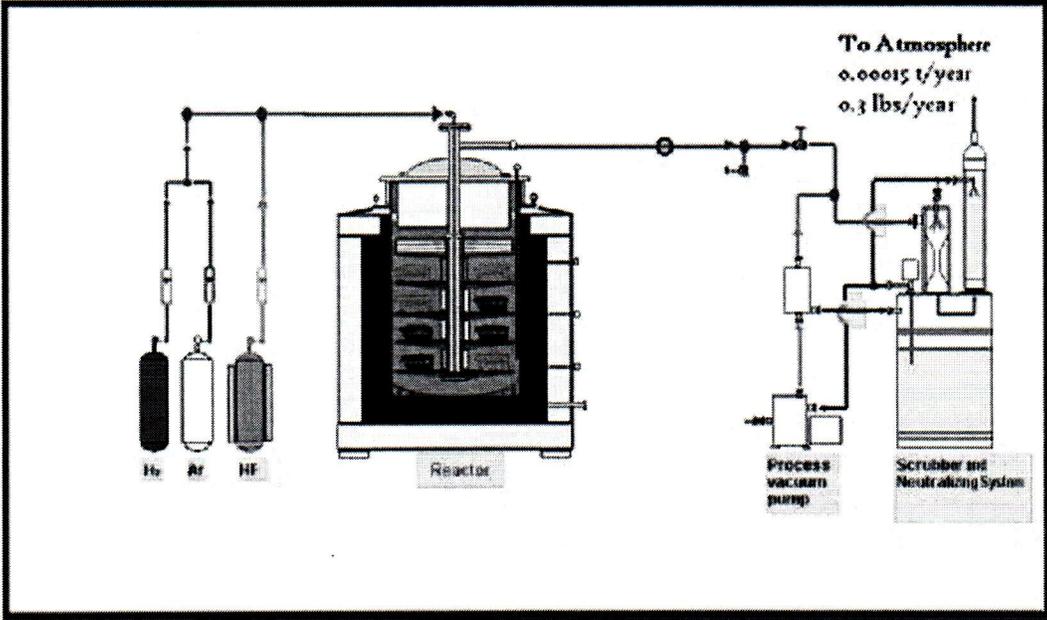
- (I) An alarm will sound
- (II) The process will stop = NO GAS FLOW
- (III) HF will be disabled
- (IV) A Fail Safe Argon Pressure-Hold- will prevent HF escape until the problem is resolved.
- (V) The Fire department will be notified
- (VI) An NH₃ shower will be enabled for the leaks in the HF panel.

In summary, the system has controls in place to prevent above normal discharge of HF to the atmosphere. The estimated discharge is below the requirements listed in Rule 62-210.310, F.A.C for air construction permit or non-Title V air operation permit and finally the system meets the Exemptions requirements of Rule 62-4.040.

You may contact any me if any additional information is required:

Geon Gordon-EHS Coordinator
561-354-1179 (Office)
561-452-5625 (mobile)
ggordon@psm.com

Fluoride Ion Cleaning System Process Flow Schematic



Re: Permit Required:

We are looking to install a process at our facility in Jupiter which involves the use of HF (Hydrogen Fluoride (Hydrofluoric acid –CAS 7664-39-3) which is listed on **“The Clean Air Act Amendments of 1990 List of Hazardous Air Pollutants”**

Based on the information in Rule 62-210.300 of F.A.C Permit Required and also additional information provided by PSM’s process engineer, it would seem that this process will have the **potential** to emit:

- 1,000 pounds per year or more of this hazardous air pollutant.

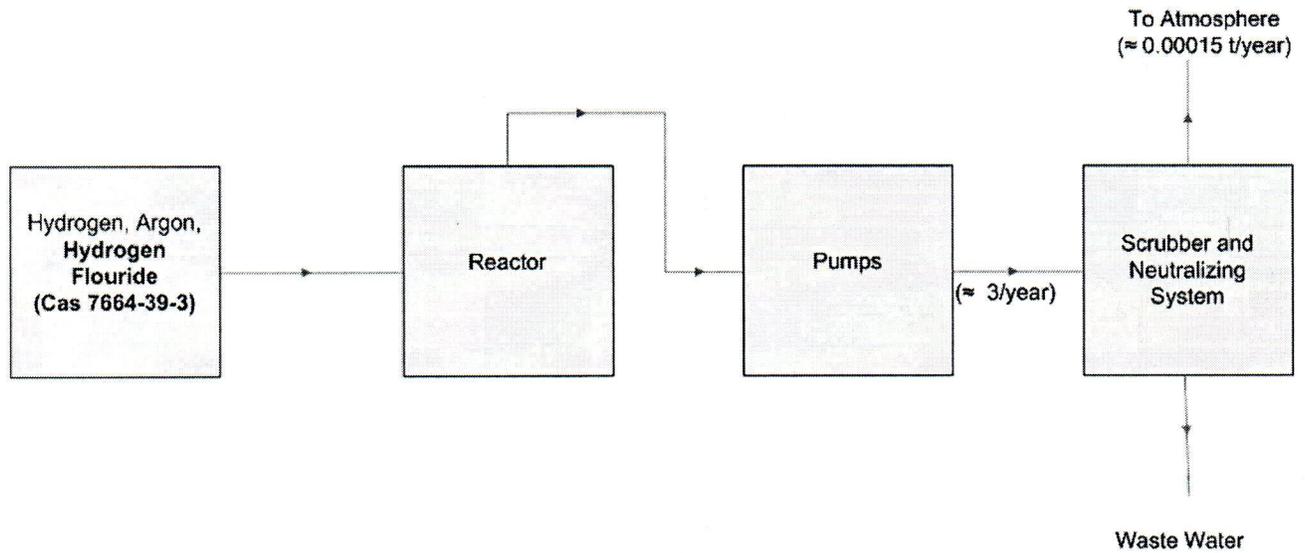
The emission will be controlled by a scrubber prior to release to ensure that the concentration of this material is reduced to the lowest limit possible. A Process flow diagram is attached for your review.

Please advise us if :

- 1) We are required to apply for a Air Construction permit prior to the installation of the Unit onsite (the unit will be purchased fully constructed and assembled).

Again Thanks for your time.

Fluoride Ion Cleaning System



Assumption:

System operates 7 days per week, 52 weeks/year

Before Scrubber: System uses approx 6775 lbs/year (3 t/year)

After Scrubber: 0.34 lbs/year HF (approx 0.00015 t/year)

Department of
Environmental Protection
Division of Air Resource Management

SUBMITTED APPLICATION REPORT
APPLICATION FOR AIR PERMIT - NON-TITLE V RENEWAL

Application Number: 3961- 1
Application Name: GEON GORDON
Date Submitted: 24 November 2014

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: POWER SYSTEMS MFG., LLC	
2. Site Name: PSM/JUPITER	
3. Facility Identification Number: 0990687	4. Facility Status Code: A - Active

Application Contact

1. Application Contact Name: GEON GORDON	Application Contact Job Title: Program Lead, EH&S
2. Application Contact Mailing Address: Organization/Firm: POWER SYSTEM MFG., LLC Street Address: 1440 WEST INDIANTOWN ROAD City: JUPITER State: FL Zip Code: 33458	
3. Application Contact Telephone Numbers: Telephone: (561) 354-1100 ext. Fax: (561) 354-4699	
Application Contact Email Address: geon.gordon@psm.com	

Owner/Authorized Representative Statement

1. Owner/Authorized Representative Name: STEVEN AUSTIN	Owner/Authorized Representative Job Title: Manager, EHS Product Line GTOEM
2. Owner/Authorized Representative Mailing Address: Organization/Firm: POWER SYSTEM MFG. LLC Street Address: 1400 WEST INDIANTOWN ROAD City: JUPITER State: FL Zip Code: 33458	
3. Owner/Authorized Representative Telephone Numbers:	

Telephone: (561) 354- ext. Fax: 1184
Owner/Authorized Representative Email Address: Steven.t.Austin@alstom.com
4. Owner/Authorized Representative Statement: By entering my PIN below, I certify that I am the owner or authorized representative of the facility addressed in this application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of the facility or any permitted emissions unit.

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Permit Type
1	Chemical Striping Plant with an Alkaline Scrubber	AO2C

Note: The fee calculation information associated with this application may be accessed from the Main Menu of ESPAP.

Application Comment

--

II. FACILITY INFORMATION
A. GENERAL FACILITY INFORMATION

Facility Contact

1. Facility Contact Name: BRIAN PIETRZYK	Facility Contact Job Title: FACILITY MANAGER
2. Facility Contact Mailing Address: Organization/Firm: POWER SYSTEMS MFG., LLC Street Address: 1440 WEST INDIANTOWN ROAD City: JUPITER State: FL Zip Code: 33458	
3. Facility Contact Telephone Numbers: Telephone: (561) 354-1176 ext. Fax: (561) 374-4699	
4. Facility Contact Email Address: BRIAN.PIETRZYK@PSM.COM	

Facility Supplemental Requirements

1. Area Map Showing Facility Location	Applicable	Waiver Requested	Attachment
2. Facility Plot Plan	Applicable	Waiver Requested	Attachment
3. Process Flow Diagram(s)	Applicable	Waiver Requested	Attachment
4. Precautions to Prevent Emissions of Unconfined Particulate Matter	Applicable	Waiver Requested	Attachment
Supplemental Information Comment:			

Facility Attachments

Supplemental Item	Electronic File Name	Attachment Description	Electronic Document	Date Uploaded
Area Map Showing Facility Location	PSM - Facility Plot Plan.pdf	PSM - Facility Plot Plan	Yes	11/21/2014
	Area Map Showing Facility Location - PSM.pdf	Area Map Showing Facility Location - PSM	Yes	11/21/2014
Facility Plot Plan	PSM - Facility Plot Plan.pdf	PSM - Facility Plot Plan	Yes	11/21/2014
Process Flow Diagram(s)	Emission Sources Location Map.pdf	Emission Sources Location Map	Yes	11/21/2014
	Technical Support Document - Air Permit No. 0990687-002-AO.pdf	Technical Support Document - Air Permit No. 0990687-002-AO	Yes	11/21/2014
	Hydrogen Fluoride Ion Cleaning.pdf	Hydrogen Fluoride Ion Cleaning	Yes	11/21/2014
Precautions to Prevent Emissions of Unconfined Particulate Matter	PSM-Precautions-for-Emissions-and-Particulates.pdf	PSM-Precautions-for-Emissions-and-Particulates	Yes	11/21/2014

Facility Comment

Manufacturing and Reconditioning of gas turbine components

Emissions Unit ID 1**III. EMISSIONS UNIT INFORMATION****Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in this Section: Chemical Striping Plant with an Alkaline Scrubber		
2. Emissions Unit Status	3. Long-Term Reserve Shutdown	

Code: A	Date:
------------	-------

4. Control Equipment Method/Description :		
<u>Code</u>	<u>Equipment</u>	<u>Description</u>
70	SODIUM-ALKALI SCRUBBING SYSTEM	Alkaline (NaOH) Scrubber

Emissions Unit Operating Capacity and Schedule

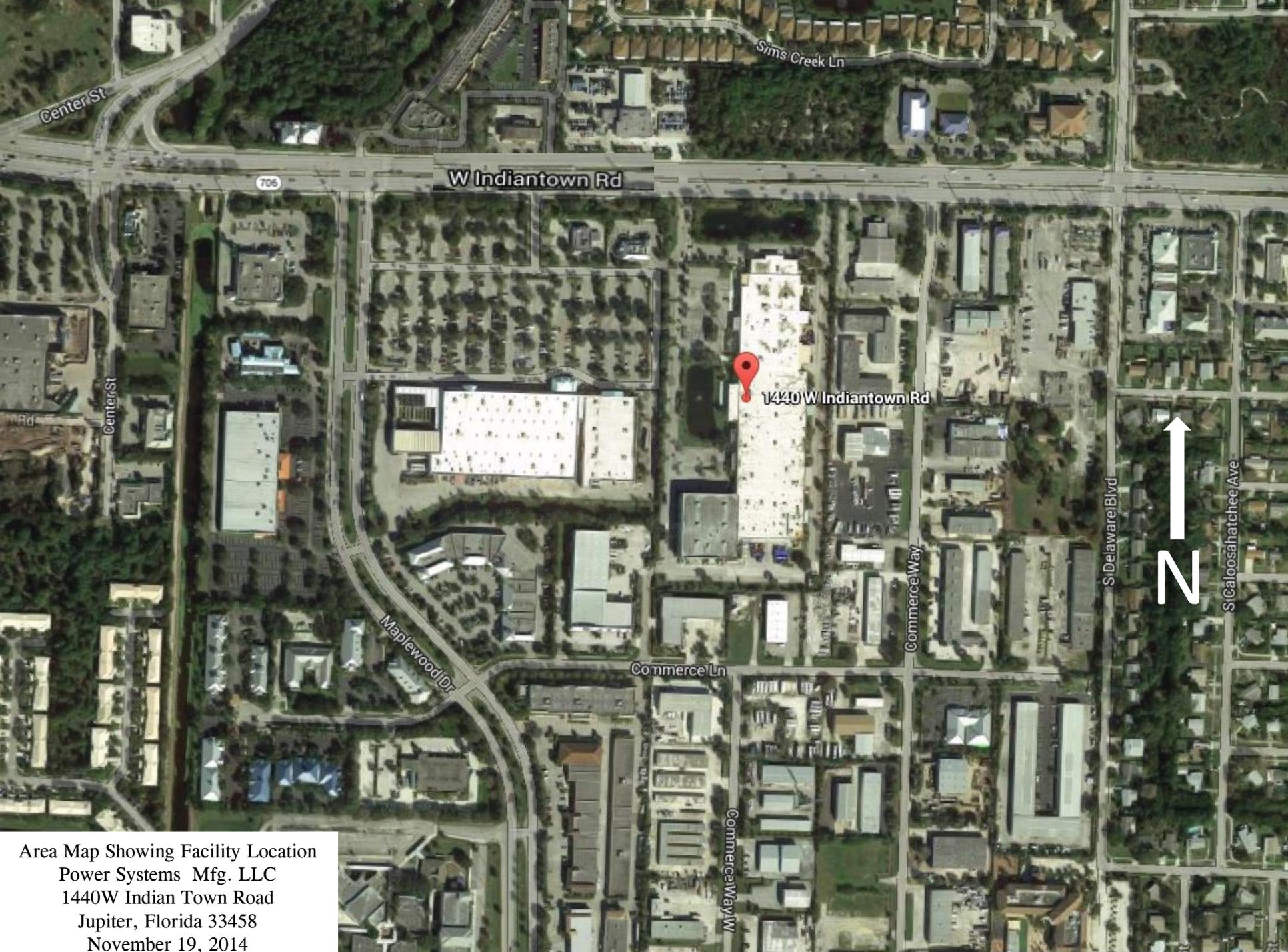
No Capacity information submitted.

Emissions Unit Supplemental Requirements

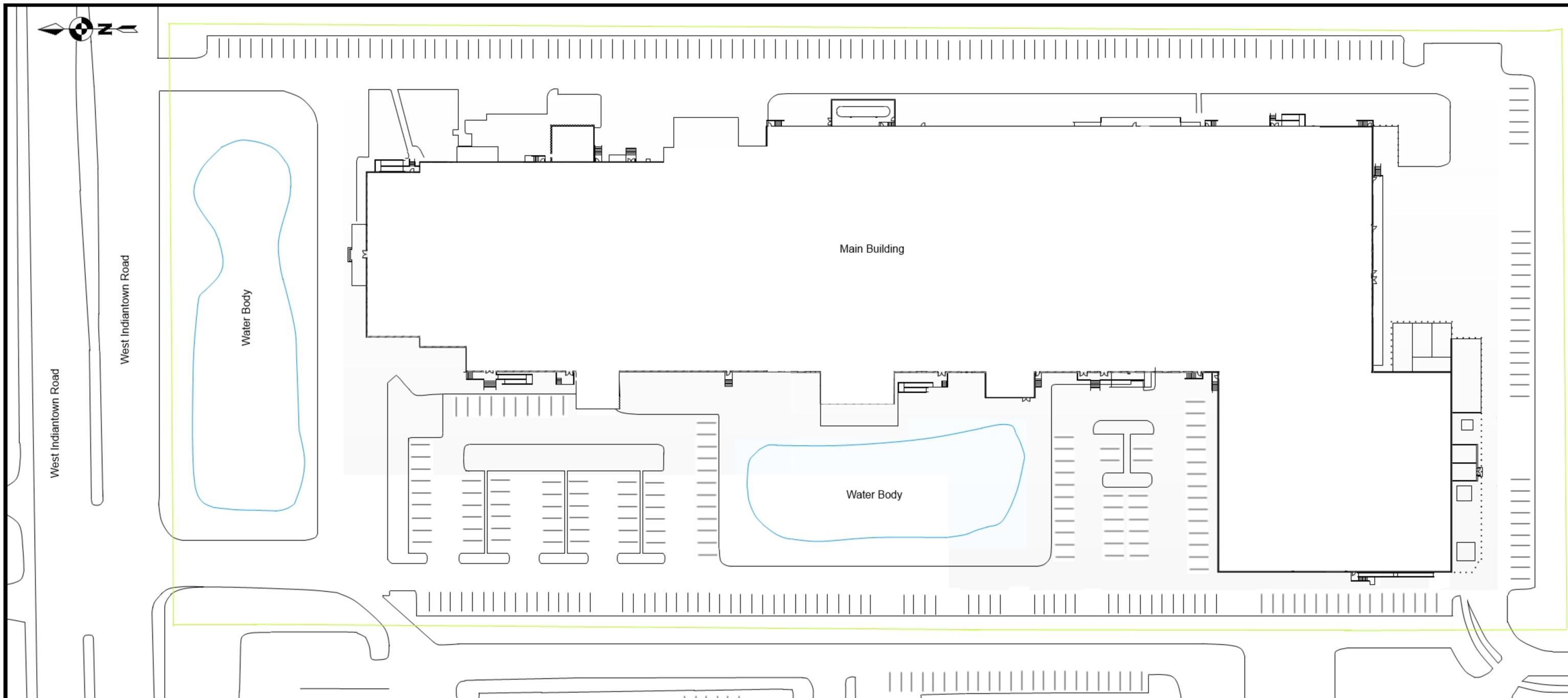
1. Fuel Analysis or Specification	Applicable	Waiver Requested	Attachment
2. Compliance Test Report	Applicable	Previously Submitted, Date:	Attachment
3. Procedures for Startup and Shutdown	Applicable	Waiver Requested	Attachment
4. Operation and Maintenance Plan	Applicable	Waiver Requested	Attachment
5. Other Information Required by Rule or Statute	Applicable		Attachment
6. Supplemental Requirements Comment:			

Emissions Unit Comment

--



Area Map Showing Facility Location
Power Systems Mfg. LLC
1440W Indian Town Road
Jupiter, Florida 33458
November 19, 2014



LEGEND:
 PROPERTY LINE
 WATER BODY

SCALE (FEET):


TITLE:
 FACILITY PLOT PLAN

LOCATION:
 POWER SYSTEMS MFG. LLC
 1440 WEST INDIANTOWN ROAD
 JUPITER, FLORIDA 33458

REVISION:
 1.0

PROJECT:
 914-0000-0031 - PSM Air Inventory

DRAWN BY:
 MJH

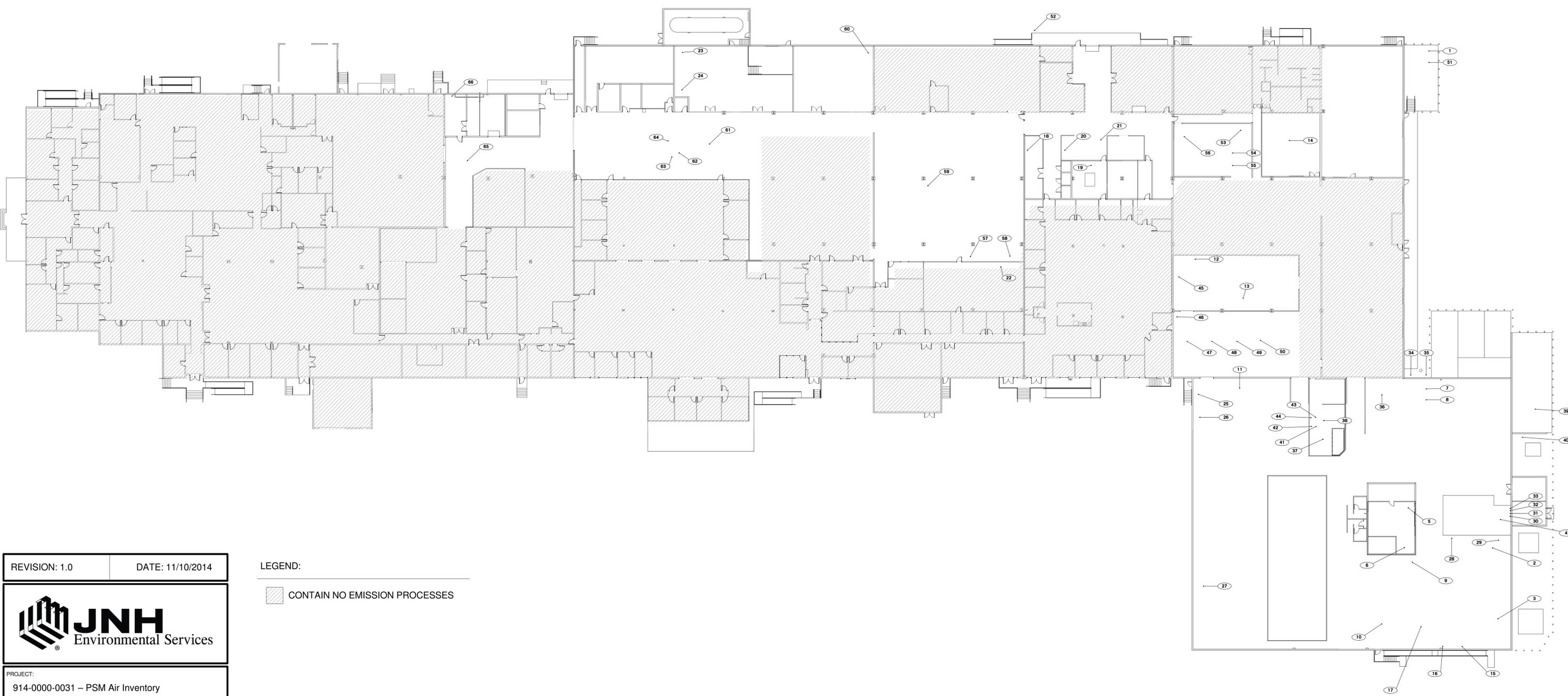
CHECKED BY:
 JNH

DATE:
 11/12/2014

FILE:
 PSMFPP.VSD

DRAWING NUMBER:
 PSM-914-0000-0031FPP





REVISION: 1.0 DATE: 11/10/2014



PROJECT:
914-0000-0031 – PSM Air Inventory

TITLE:
Emission Sources Location Map

LOCATION:
Power Systems Mfg. LLC
1440 W Indiantown Rd
Jupiter, Florida 33458

DRAWN BY: MJH	CHECKED BY: JNH	FILE: PSEM.VSD
------------------	--------------------	-------------------

DRAWING NUMBER: PSM-914-0000-0031	SCALE: NONE
--------------------------------------	----------------

LEGEND:

 CONTAIN NO EMISSION PROCESSES

PSM PRECAUTIONS FOR EMISSIONS AND PARTICULATES

1. A written Spill Prevention, Control, and Countermeasure Plan (SPCC Plan) has been established for the facility. This document outlines reasonable precautions taken during loading, unloading, storage, and handling activities to help control emissions of unconfined particulate matter.
2. A written Stormwater Pollution Prevention Plan (SWPPP) has been established for the facility. This document features policies and procedures to prevent spills and leaks of potential pollutants that could result in surface or stormwater pollution.
3. At the facility, abrasive blasting, belting, and grinding operations are located near or in appropriate hoods, fans, filters, and similar equipment that are used to contain, capture, and properly vent emissions and particulate matter.
4. Outdoor storage of containers, trash, and material is maintained per SWPPP et al. policies and procedures.
5. The facility is regularly maintained and inspected.
6. When construction, alteration, demolition, or industrial related work is scheduled, precautions are taken to help control emissions of unconfined particulate matter.



November 2014

Technical Support Document

Air Permit No. 0990687-002-AO

Power Systems Mfg. LLC
1440 West Indiantown Road
Jupiter, Florida



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ABBREVIATIONS

List of Abbreviations

" w.c.	Pressure measured in inches of water column
acfm	Actual cubic feet per minute
ADP	Air Discharge Permit
AP-42	Compilation of Emission Factors, AP-42, Fifth Edition, Volume 1, Stationary Point and Area Sources - published by the US Environmental Protection Agency
BACT	Best Available Control Technology
BART	Best Available Retrofit Technology
Btu	British thermal unit
CPM	Condensable particulate matter
cfm	Cubic feet per minute
CFR	Code of Federal Regulations
CO	Carbon monoxide
dscfm	Dry standard cubic feet per minute
EPA	U.S. Environmental Protection Agency
gr/dscf	Grains per dry standard cubic foot (68 °F, 1 atmosphere)
HAP	Hazardous air pollutant listed pursuant to Section 112 of the Federal Clean Air Act
hp	Horsepower
hp-hr	Horsepower - hour
LAER	Lowest Achievable Emission Rate
lb/hp-hr	Pounds per horsepower hour
lb/hr	Pounds per hour
lb/MMBtu	Pound per million British thermal units
lb/yr	Pounds per year
MMBtu/hr	Millions of British thermal units per hour
NO _x	Nitrogen oxides
PM	Total particulate matter (includes both filterable and condensable particulate matter as measured by EPA Methods 5 and 202)
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to 10 micrometers (includes both filterable and condensable particulate matter as measured by EPA Methods 5 and 202)
PM _{2.5}	Particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometers (includes both filterable and condensable particulate matter as measured by EPA Methods 5 and 202)

ABBREVIATIONS

ppm	Parts per million
ppmv	Parts per million by volume
ppmvd	Parts per million by volume, dry
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SDS	Safety Data Sheet
SO ₂	Sulfur dioxide
T-BACT	Best Available Control Technology for toxic air pollutants
tpy	Tons per year
VOC	Volatile organic compound

1.1 OVERVIEW

Power Systems Mfg. LLC (PSM) is a wholly-owned subsidiary of Alstom, Inc. and provides technologically advanced aftermarket gas turbine components, parts reconditioning services and Long Term Agreements (LTAs) to the worldwide power generation industry. PSM occupies the entire 13.32 acre parcel located at 1440 West Indiantown Road in Jupiter, Florida (referred to as the “facility”). The facility is identified by the primary Standard Industrial Classification (SIC) Code 3511 and the secondary SIC Code 8711.

1.2 PURPOSE

This technical support document was created and is maintained to achieve the following:

- to define all current emission sources at the facility;
- to ensure all emissions are properly registered and/or permitted;
- to assist the facility in regulatory compliance;
- to help educate PSM personnel of emission sources at the facility; and
- to assist local, state, and federal regulators.

1.3 REVISIONS

This document must be maintained to be reflective of actual site conditions. It is a living document and should be updated whenever there is any change in emission sources at the facility, including but not limited to: type of fuel burned; type of material processed, stored, or handled; type of air pollution control equipment; pollutants emitted; applicable standards; and applicable regulatory control criteria.

2.1 PERMITTING ACTIONS

At the facility, the below listed emission sources are officially exempt or currently permitted. Prior to making any changes related to the below listed emission sources, the referenced permits and/or documents should be carefully reviewed to ensure compliance.

- The initial construction of a chemical stripper line to remove the coating material from gas turbine parts was permitted. For additional details, reference Air Permit No. 0990687-001-AC issued by the Florida Department of Health on July 23, 2009.
- The operation of a chemical stripping plant equipped with an alkaline fume scrubber is allowed. For additional details, reference Air Permit No. 0990687-002-AO issued by the Florida Department of Health on March 1, 2010.
- The operation of thermal spray coating process is exempt from permitting requirements. For additional details, reference Air Permit No. 0990687-002-AO issued by the Florida Department of Health on March 1, 2010.

3.1 CNC MACHINING

At the facility there are one or more CNC (computer numerical control) machines that cut and grind materials. During operation, CNC machines may emit coolant mists. These mists are controlled with mist collectors as needed. Currently, all CNC machines used at the facility are considered an insignificant activity and produce no discernable or quantifiable listed air contaminants.

For additional details, reference Source ID 27 in Table 4-1.

3.2 INSPECTION TESTING PROCESSES

At the facility, various inspection testing processes are conducted to inspect parts. These processes generate fumes and inert gases that are released both internally and externally.

For additional details, reference the following Source IDs 18, 19, 41, 42, 43, 44, 53, 54, 55, 56, 60, 62, 63, 64, 65, and 66 in Table 4-1.

3.3 HEAT TREATING

Heat treating is a process used to alter the physical, and sometimes chemical, properties of a material. Heat treatment involves the use of heating or chilling, normally to extreme temperatures, to achieve a desired result such as hardening or softening of a material. Currently, all heat treating processes used at the facility are considered an insignificant activity and produce no discernable or quantifiable listed air contaminants.

For additional details, reference the following Source IDs 7, 8, 34, 35, 39, and 40 in Table 4-1.

3.4 MECHANICAL AND CHEMICAL CLEANING

At the facility, various mechanical and chemical cleaning operations are conducted including but not limited to ultrasonic cleaning and industrial aqueous part washing. Materials used during these operations included but are not limited to hydrogen fluoride, hydrochloric acid (HCL), acetone, detergents, and blast grit.

A chemical stripper, which is identified as Model Number PT506-49S, serves to remove previous metallic coatings on turbine components. This process uses HCL and sodium hydroxide (NaOH) solutions. The emissions of HCL are controlled by an alkaline scrubber manufactured by DUALL division (or equivalent). The scrubber operates at 6,000 cubic feet per minute, has a pH between 8 and 9.5, and recycles the NaOH/H₂O at a rate of 52 to 75 gallons per hour.

For additional details, reference Source IDs 1, 4, 5, 6, 9, 10, 14, 15, 16, 17, 23, 24, 30, 31, 32, 33, 36, and 45 in Table 4-1.

3.5 MISCELLANEOUS

There are two (2) emergency generators on site. The first is 150 kW the second is 100 kW. The both use ultra-low sulfur diesel (ULSD). This is an insignificant source. In 2013, diesel fuel total amount used in all generators operation was less than 250 gallons.

For additional details, reference Source IDs 51 and 52 in Table 4-1.

3.6 VARIOUS COATING PROCESSES

At the facility, various spraying coating processes are conducted including thermal spray coating. Thermal spray coating processes use melted (or heated) materials, which are sprayed onto a surface. At the facility, both electric plasma spray (EPS) and high velocity oxygen fuel (HVOF) thermal spray processes are conducted.

Input materials for spraying coating processes include powdered metals, aliphatic hydrocarbon, and oxygen. At the facility, all spraying coating emissions are captured using dust collectors with bag or cartridge type filters.

For additional details, reference Source IDs 2 and 3 in Table 4-1.

3.7 WELDING AND GRINDING

At the facility there are various welding and grinding operations including metal inert gas (MIG) welding, which produces gas metal arc welding emissions. Particulate emissions are collected by a dust collector or a downdraft table with a paper-pleated filter or a high-efficiency particulate air (HEPA) filter.

For additional details, reference the following Source IDs 11, 12, 13, 20, 21, 22, 23, 24, 25, 26, 28, 29, 46, 47, 48, 49, 50, 57, 58, 59, and 61 in Table 4-1.

SECTION 4 – EMISSION SOURCES IDENTIFICATION

4.1 EQUIPMENT AND ACTIVITIES

Equipment and activities that generate emissions are outlined in Table 4-1.

Source ID	Process Source	Input	Control Device	Method	Output	Type/ Location	Method	Input Quantities
1	Parts cleaner / aqueous chemical stripping acid line.	Hydrochloric acid fume.	Alkaline wet fume scrubber with exhaust noise control muffler.	Neutralization with sodium hydroxide solution.	Water vapor.	Point source (external).	Reference initial construction permit data page 2 of 8 dated July 23, 2009.	Yearly average of hydrochloric acid is 19.5 tons.
2	High velocity oxygen fuel (HVOF) coating booth / plasma metal parts coating.	Powdered metals, aliphatic hydrocarbon, and oxygen.	9,500 CFM dust collector with cartridge filters.	Particulate capture.	PM10/PM2.5 emissions as byproducts of kerosene fuel combustion. Captured metals are recycled.	Point source (external).	Reference initial construction permit data page 2 of 8 dated July 23, 2009.	In 2013, Solvent 142-66, CAS# 64742-88-7, usage was 5,005 lbs. (5,311.8 gallons at 6.59 lbs per gallon.). During 2013, the total powdered metal used in all plasma coating operation was 36,756 lbs.
3	Electric Plasma Spray (EPS) Coating Booth / plasma metal parts coating.	Powdered metals.	7,000 CFM dust collector with HEPA bag filters.	Particulate capture.	PM-10/PM-2.5 M captured metals are recycled.	Point source (external).	Reference initial construction permit data page 2 of 8 dated July 23, 2009.	In 2013, powdered metal used in all plasma coating operation totaled 36,756 lbs.
4	Hydrofluoric (FIC) Cleaning System - Parts Cleaning.	Hydrogen fluoride gas.	Wet packed bed fume scrubber.	Neutralization with sodium hydroxide solution and ammonia.	Water vapor.	Point source (external).	USEPA Method 13 or equivalent.	In 2013, the total hydrofluoric used was 240 lbs.

SECTION 4 – EMISSION SOURCES IDENTIFICATION

Table 4-1 (continued) Equipment / Activity Identification								
Source ID	Process Source	Input	Control Device	Method	Output	Type/ Location	Method	Input Quantities
5	Braze Room / parts cleaning.	Acetone.	Fume extractor / lab hood.	Direct discharge.	De minimis acetone.	Point source (external).	Insignificant activity. No discernable or quantifiable listed air contaminants. Non-HAP and VOC-Exempt Solvent.	In 2013, a total of 328.44 gallons of acetone was used shop wide.
6	Braze Room / parts cleaning.	Acetone.	Fume extractor / lab hood.	Direct discharge.	De minimis acetone.	Point source (external).	Insignificant activity. No discernable or quantifiable listed air contaminants. Non-HAP. VOC exempt solvent.	In 2013, a total of 328.44 gallons of acetone was used shop wide.
7	Heat Treatment Oven / parts heat treating.	Metal parts.	Heat extractor / none.	Direct discharge.	Process heat.	Point source (external).	Insignificant activity. No discernable or quantifiable air contaminants.	Not applicable.
8	Beavermatic® Heat Treatment Oven / parts heat treating.	Metal parts and minor flash off of residues.	Heat extractor / none.	Direct discharge.	Process heat.	Point source (external).	Insignificant activity. No discernable or quantifiable air contaminants.	Not applicable.
9	Ultrasonic cleaning line dryer section / parts cleaning.	Wet parts.	Dryer exhaust / none.	Direct discharge.	Water vapor.	Point source (internal).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not applicable.

SECTION 4 – EMISSION SOURCES IDENTIFICATION

Table 4-1 (continued) Equipment / Activity Identification								
Source ID	Process Source	Input	Control Device	Method	Output	Type/ Location	Method	Input Quantities
10	Industrial aqueous part washer / parts cleaning.	Parts and detergent.	Washer exhaust / none.	Direct discharge.	Water vapor.	Point source (external).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not applicable.
11	RECO Area grinding side / metal inert gas (MIG) parts welding.	Welding fumes, swarfs, grit, metal oxides, and debris.	Downdraft table either paper-pleated filter (99.8% at 0.5 micron) or HEPA filter (99.97% at 0.3 micron). Filters are 24 inch x 24 inches x 4 inches. 340 CFM approximately.	Direct discharge.	Welding GMAW emissions.	Point source (internal).	USEPA AP 42 3-09-052 or equivalent.	In 2013, welding wire used in all welding operations totaled 2,130 lbs.
12	Parts benching / grinding and belting operations.	Swarfs, grit, metal oxides, and debris.	Dust collector / Pulsatron / HEPA.	Particulate capture.	Insignificant.	Point source (internal).	USEPA Method 18 or equivalent.	Input unquantifiable multitasking work center. Filtration system monitored with Magnehelic® gauges or similar.

SECTION 4 – EMISSION SOURCES IDENTIFICATION

Table 4-1 (continued) Equipment / Activity Identification								
Source ID	Process Source	Input	Control Device	Method	Output	Type/ Location	Method	Input Quantities
13	Benching parts grinding operations.	Swarfs, grit, metal oxides, and debris.	Downdraft table either paper-pleated filter (99.8% at 0.5 micron) or HEPA filter (99.97% at 0.3 micron). Filters are 24 inch x 24 inches x 4 inches. 340 CFM approximately.	Particulate capture.	Insignificant	Point source (internal).	USEPA Method 18 or equivalent.	Input unquantifiable multitasking work center. Filtration system monitored with Magnehelic® gauges or similar.
14	Grit blast room, booths and blast cabinet / abrasive parts blasting.	Blast grit, metal oxides, and debris.	4,000 CFM dust Collectors.	Particulate capture.	Insignificant.	Closed loop.	USEPA AP-42 13.2.6 or equivalent.	In 2013, blasting media totaled 270,568 lbs shop wide.
15	Grayson robotic grit blaster / abrasive parts blasting.	Blast grit, metal oxides, and debris.	Dust collector / filter.	Particulate capture.	Insignificant.	Point source (external).	USEPA AP-42 13.2.6 or equivalent.	In 2013, blasting media totaled 270,568 lbs shop wide.
16	Lance walk in blast booth / abrasive parts blasting.	Blast grit, metal oxides, and debris.	Dust collector / Pulsatron / HEPA.	Particulate capture.	Insignificant.	Point source (internal).	USEPA AP-42 13.2.6 or equivalent.	In 2013, blasting media totaled 270,568 lbs shop wide.
17	Clemco® blast cabinet / abrasive parts blasting.	Blast grit, metal oxides, and debris.	Dust collector / Filter.	Particulate capture.	Insignificant.	Point source (internal).	USEPA AP-42 13.2.6 or equivalent.	In 2013, blasting media totaled 270,568 lbs shop wide.

SECTION 4 – EMISSION SOURCES IDENTIFICATION

Source ID	Process Source	Input	Control Device	Method	Output	Type/ Location	Method	Input Quantities
18	MET Lab hood and cut off saw / parts testing, and inspection.	Acetone.	Fume extractor / lab hood / none.	Direct discharge.	Insignificant.	Point source (external).	Insignificant activity. No discernable or quantifiable listed air contaminants.	In 2013, a total of 328.44 gallons of acetone was used shop wide.
19	Main MET lab hoods and polisher / parts testing and inspection.	Acetone.	Fume extractor / lab hood / none.	Direct discharge.	Insignificant.	Point source (external).	Insignificant activity. No discernable or quantifiable listed air contaminants. Non-HAP and VOC-Exempt Solvent.	In 2013, a total of 328.44 gallons of acetone was used shop wide.
20	Selective laser melting [®] (SLM) machine / parts welding repair.	Metal powder, dross, and inert gases.	Dust collector / HEPA filter.	Particulate capture.	Insignificant.	Point source (external).	USEPA Method 18 or equivalent.	Yearly maximum powdered metal usage is 300 lbs.
21	SLM Benchtron [®] / parts grinding and belting operations.	Swarfs, grit, metal oxides, and debris.	Downdraft table either paper-pleated filter (99.8% at 0.5 micron) or HEPA filter (99.97% at 0.3 micron). Filters are 24 inch x 24 inches x 4 inches. 340 CFM approximately.	Particulate capture.	Insignificant.	Point source (external).	USEPA Method 18 or equivalent.	Input unquantifiable multitasking work center. Filtration system monitored with Magnehelic [®] gauges or similar.

SECTION 4 – EMISSION SOURCES IDENTIFICATION

Table 4-1 (continued)								
Equipment / Activity Identification								
Source ID	Process Source	Input	Control Device	Method	Output	Type/ Location	Method	Input Quantities
22	Downdraft table FSS / MIG welding parts.	Welding fume, swarfs, grit, metal oxides, and debris.	Downdraft table with filter(s).	Particulate capture.	Insignificant.	Point source (internal).	USEPA AP-42 3-09-052 or equivalent.	In 2013, welding wire used in all welding operations totaled 2,130 lbs.
23	Empire walk in blast booth / abrasive parts blasting.	Blast grit, metal oxides, and debris.	Dust collector filter.	Particulate capture.	Insignificant.	Point source (internal).	USEPA AP-42 13.2.6 or equivalent.	In 2013, blasting media totaled 270,568 lbs shop wide.
24	Clemco® blast cabinet / abrasive parts blasting.	Blast grit, metal oxides, and debris.	Dust collector filter.	Particulate capture.	Insignificant.	Point source (internal).	USEPA AP-42 13.2.6 or equivalent.	In 2013, blasting media totaled 270,568 lbs shop wide.
25	RECO #1 / parts grinding and belting operations.	Swarfs, grit, metal oxides, and debris.	Downdraft table either paper-pleated filter (99.8% at 0.5 micron) or HEPA filter (99.97% at 0.3 micron).	Particulate capture.	Insignificant.	Point source (internal).	USEPA Method 18 or equivalent.	Input unquantifiable multitasking work center. Filtration system monitored with Magnehelic® gauges or similar.
26	RECO #2 / parts grinding and belting operations.	Swarfs, grit, metal oxides, and debris.	Downdraft table either paper-pleated filter (99.8% at 0.5 micron) or HEPA filter (99.97% at 0.3 micron).	Particulate capture.	Insignificant.	Point source (internal).	USEPA Method 18 or equivalent.	Input unquantifiable multitasking work center. Filtration system monitored with Magnehelic® gauges or similar.
27	Hoffmann® grinder with torit / parts grinding.	Coolant mist.	Mist collector.	Mist Capture.	Insignificant.	Point source (internal).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not applicable.

SECTION 4 – EMISSION SOURCES IDENTIFICATION

Table 4-1 (continued) Equipment / Activity Identification								
Source ID	Process Source	Input	Control Device	Method	Output	Type/ Location	Method	Input Quantities
28	Coating area “A” / parts benching, grinding, and belting operations.	Swarfs, grit, metal oxides, and debris.	Downdraft table either paper-pleated filter (99.8% at 0.5 micron) or HEPA filter (99.97% at 0.3 micron). Filters are 24 inch x 24 inches x 4 inches. 340 CFM approximately.	Particulate capture.	Insignificant.	Point source (internal).	USEPA Method 18 or equivalent.	Input unquantifiable multitasking work center. Filtration system monitored with Magnehelic® gauges or similar.
29	Coating area “B” / parts benching, grinding, and belting operations.	Swarfs, grit, metal oxides, and debris.	Downdraft table either paper-pleated filter (99.8% at 0.5 micron) or HEPA filter (99.97% at 0.3 micron). Filters are 24 inch x 24 inches x 4 inches. 340 CFM approximately.	Particulate capture.	Insignificant.	Point source (internal).	USEPA Method 18 or equivalent.	Input unquantifiable multitasking work center. Filtration system monitored with Magnehelic® gauges or similar.
30	Hydrofluoric FIC cleaning system / parts cleaning.	None.	Roof emergency relief valve / none.	None.	None.	Point source (external).	USEPA Method 13 or equivalent.	Not applicable.
31	Hydrofluoric FIC cleaning system / parts cleaning.	Process gases.	Wet fume scrubber / 2 inch exhaust.	Neutralization.	Water vapor.	Point source (external).	USEPA Method 13 or equivalent.	In 2013, total hydrofluoric used was 240 lbs.

SECTION 4 – EMISSION SOURCES IDENTIFICATION

Table 4-1 (continued) Equipment / Activity Identification								
Source ID	Process Source	Input	Control Device	Method	Output	Type/ Location	Method	Input Quantities
32	Hydrofluoric FIC cleaning system / parts cleaning.	Atmospheric vent.	Wet fume scrubber -vent 2 Inch / none.	Neutralization.	Insignificant.	Point source (external).	USEPA Method 13 or equivalent.	Atmospheric vent from reservoir section.
33	Hydrofluoric FIC cleaning system / parts cleaning.	Air bleeder.	Process bleeder 3/4 inch / none.	Direct discharge.	Insignificant.	Point source (external).	USEPA Method 13 or equivalent.	Atmospheric air.
34	Heat treatment oven / parts heat treating (Beavermatic®).	Above ambient inert gases and minor flash off of residues.	Heat treat vent "A" 2 Inch (S.S).	Direct discharge.	Insignificant.	Point source (external).	Insignificant activity. No discernable or quantifiable air contaminants.	Not applicable.
35	Heat treatment oven / parts heat treating (Beavermatic®).	Above ambient inert gases and minor flash off of residues..	Heat treat vent "B" 2 Inch (S.S).	Direct discharge.	Insignificant.	Point source (external).	Insignificant activity. No discernable or quantifiable air contaminants.	Not applicable.
36	Trinco® blast cabinet / abrasive parts blasting.	Blast grit, metal oxides, and debris.	Dust collector filter.	Particulate capture.	Insignificant.	Point source (internal).	USEPA AP-42 13.2.6 or equivalent.	In 2013, blasting media totaled 270,568 lbs shop wide.
37	FPI inspection booth man cooler fan exhaust / parts inspection.	Shop air.	Forced air vent / none.	Direct discharge.	Shop air.	Point source (internal).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not applicable.
38	FPI inspection booth man cooler fan exhaust / parts inspection.	Shop air.	Forced air vent / none.	Direct discharge.	Shop air.	Point source (internal).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not applicable.

SECTION 4 – EMISSION SOURCES IDENTIFICATION

Table 4-1 (continued) Equipment / Activity Identification								
Source ID	Process Source	Input	Control Device	Method	Output	Type/ Location	Method	Input Quantities
39	Vacuum pump exhaust #SF73 small 3" PVC / parts heat treating.	Oven atmosphere.	Process vent 3 inch / none.	Oven Atmosphere.	Insignificant.	Point source (external).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not applicable.
40	Vacuum pump exhaust #SF103 large 3" PVC - parts heat treating.	Oven atmosphere.	Process vent 3 inch / none.	Oven Atmosphere.	Insignificant.	Point source (external).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not applicable.
41	FPI inspection booth man cooler fan exhaust / parts inspection.	Shop air.	Forced air vent / none.	Direct discharge.	Shop air.	Point source (internal).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not applicable.
42	FPI inspection booth man cooler fan exhaust / parts inspection.	Shop air.	Forced air vent / none.	Direct discharge.	Shop air.	Point source (internal).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not applicable.
43	FPI inspection booth man cooler fan exhaust / parts inspection.	Shop air.	Forced air vent / none.	Direct discharge.	Shop air.	Point source (internal).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not applicable.

SECTION 4 – EMISSION SOURCES IDENTIFICATION

Table 4-1 (continued) Equipment / Activity Identification								
Source ID	Process Source	Input	Control Device	Method	Output	Type/ Location	Method	Input Quantities
44	FPI inspection booth man cooler fan exhaust / parts inspection.	Shop air.	Forced air vent / none.	Direct discharge.	Shop air.	Point source (internal).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not applicable.
45	Blast cabinet / abrasive parts blasting.	Blast grit, metal oxides, and debris.	Dust collector / filter.	Particulate capture.	Insignificant.	Point source (internal).	USEPA AP-42 13.2.6 or equivalent.	In 2013, blasting media totaled 270,568 lbs shop wide.
46	RECO area machine shop side / metal inert gas (MIG) parts welding.	Welding fume, swarfs, grit, metal oxides, and debris.	Downdraft table either paper-pleated filter (99.8% at 0.5 micron) or HEPA filter (99.97% at 0.3 micron). Filters are 24 inch x 24 inches x 4 inches. 340 CFM approximately.	Particulate capture.	Welding GMAW emissions.	Point source (internal).	USEPA AP 42 3-09-052 or equivalent.	In 2013, welding wire used in all welding operations totaled 2,130 lbs.
47	RECO area machine shop side / metal inert gas (MIG) parts welding.	Welding fume, swarfs, grit, metal oxides, and debris.	Downdraft table either paper-pleated filter (99.8% at 0.5 micron) or HEPA filter (99.97% at 0.3 micron). Filters are 24 inch x 24 inches x 4 inches. 340 CFM approximately.	Particulate capture.	Welding GMAW emissions.	Point source (internal).	USEPA AP 42 3-09-052 or equivalent.	In 2013, welding wire used in all welding operations totaled 2,130 lbs.

SECTION 4 – EMISSION SOURCES IDENTIFICATION

Table 4-1 (continued) Equipment / Activity Identification								
Source ID	Process Source	Input	Control Device	Method	Output	Type/ Location	Method	Input Quantities
48	RECO area machine shop side / metal inert gas (MIG) parts welding.	Welding fume, swarfs, grit, metal oxides, and debris.	Downdraft table either paper-pleated filter (99.8% at 0.5 micron) or HEPA filter (99.97% at 0.3 micron). Filters are 24 inch x 24 inches x 4 inches. 340 CFM approximately.	Particulate capture.	Welding GMAW emissions.	Point source (internal).	USEPA AP 42 3-09-052 or equivalent.	In 2013, welding wire used in all welding operations totaled 2,130 lbs.
49	RECO area machine shop side / metal inert gas (MIG) parts welding.	Welding fume, swarfs, grit, metal oxides, and debris.	Downdraft table either paper-pleated filter (99.8% at 0.5 micron) or HEPA filter (99.97% at 0.3 micron). Filters are 24 inch x 24 inches x 4 inches. 340 CFM approximately.	Particulate capture.	Welding GMAW emissions.	Point source (internal).	USEPA AP 42 3-09-052 or equivalent.	In 2013, welding wire used in all welding operations totaled 2,130 lbs.
50	RECO area machine shop side / metal inert gas (MIG) parts welding.	Welding fume, swarfs, grit, metal oxides, and debris.	Downdraft Table W/ Filter(s) Paper-Pleated Filter, 99.8% @ 0.5 Micron Or HEPA Filter, 99.97% @ 0.3 Micron. 24 Inch By 24 inches By 4 inches 340 CFM	Particulate capture.	Welding GMAW emissions.	Point source (internal).	USEPA AP 42 3-09-052 or equivalent.	In 2013, welding wire used in all welding operations totaled 2,130 lbs.

SECTION 4 – EMISSION SOURCES IDENTIFICATION

Table 4-1 (continued) Equipment / Activity Identification								
Source ID	Process Source	Input	Control Device	Method	Output	Type/ Location	Method	Input Quantities
51	Emergency power failure generator (150 kW).	Ultra low sulfur diesel (ULSD) 15 parts per million (PPM).	Exhaust / internal combustion engine / none.	Direct discharge.	Insignificant.	Point source (external).	USEPA AP-42 3.3 or equivalent.	In 2013, the total amount of diesel fuel used in all generators operations was less than 250 gallons.
52	Emergency power failure generator (100 kW).	Ultra low sulfur diesel (ULSD) 15 parts per million (PPM).	Exhaust / internal combustion engine / none.	Direct discharge.	Insignificant.	Point source (external).	USEPA AP-42 3.3 or equivalent.	In 2013, the total amount of diesel fuel used in all generators operations was less than 250 gallons.
53	RECO FPI line dryer / parts inspection.	Dry FPI residues.	Dust collector / HEPA filter, 99.97% at 0.3 micron.	Particulate capture.	Insignificant.	Point source (internal).	USEPA Method 18 or equivalent.	Trace residues.
54	FPI inspection booth man cooler fan exhaust / parts inspection.	Shop air.	Forced air vent / none.	Direct discharge.	Shop air.	Point source (internal).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not applicable.
55	FPI inspection booth man cooler fan exhaust / parts inspection.	Shop air.	Forced air vent / none.	Direct discharge.	Shop air.	Point source (internal).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not applicable.
56	FPI spray section / parts inspection.	Semi-volatile mists.	Mist collector.	Direct discharge.	Insignificant.	Point source (internal).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not applicable.

SECTION 4 – EMISSION SOURCES IDENTIFICATION

Table 4-1 (continued) Equipment / Activity Identification								
Source ID	Process Source	Input	Control Device	Method	Output	Type/ Location	Method	Input Quantities
57	FSS welding area / MIG welding parts.	Welding fume, swarfs, grit, metal oxides, and debris.	Downdraft table either paper-pleated filter (99.8% at 0.5 micron) or HEPA filter (99.97% at 0.3 micron). Filters are 24 inch x 24 inches x 4 inches. 340 CFM approximately.	Direct discharge.	Welding GMAW emissions.	Point source (internal).	USEPA AP 42 3-09-052 or equivalent.	In 2013, welding wire used in all welding operations totaled 2,130 lbs.
58	FSS welding area / MIG welding parts.	Welding fume, swarfs, grit, metal oxides, and debris.	Downdraft table either paper-pleated filter (99.8% at 0.5 micron) or HEPA filter (99.97% at 0.3 micron). Filters are 24 inch x 24 inches x 4 inches. 340 CFM approximately.	Direct discharge.	Welding GMAW emissions.	Point source (internal).	USEPA AP 42 3-09-052	In 2013, welding wire used in all welding operations totaled 2,130 lbs.

SECTION 4 – EMISSION SOURCES IDENTIFICATION

Table 4-1 (continued) Equipment / Activity Identification								
Source ID	Process Source	Input	Control Device	Method	Output	Type/ Location	Method	Input Quantities
59	Airfoils area / parts benching and grinding.	Swarfs, grit, metal oxides, and debris.	Downdraft table either paper-pleated filter (99.8% at 0.5 micron) or HEPA filter (99.97% at 0.3 micron). Filters are 24 inch x 24 inches x 4 inches. 340 CFM approximately.	Particulate capture.	Insignificant.	Point source (internal).	USEPA Method 18 or equivalent.	Input unquantifiable multitasking work center. Filtration system monitored with Magnehelic® gauges or similar.
60	Compressed air chamber / parts testing.	Compressed air.	Forced air vent / none.	Direct discharge.	Atmosphere.	Point source (external).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not Applicable.
61	Benching / parts grinding and belting operations.	Swarfs, grit, metal oxides, and debris.	Dust collector / filter.	Particulate capture.	Insignificant.	Point source (internal).	USEPA Method 18 or equivalent.	Input unquantifiable multitasking work center. Filtration system monitored with Magnehelic® gauges or similar.
62	FPI inspection booth man cooler fan exhaust (A) - parts inspection.	Shop air.	Forced air vent / none.	Direct discharge.	Shop air.	Point source (internal).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not Applicable.

SECTION 4 – EMISSION SOURCES IDENTIFICATION

Table 4-1 (continued) Equipment / Activity Identification								
Source ID	Process Source	Input	Control Device	Method	Output	Type/ Location	Method	Input Quantities
63	FPI inspection booth man cooler fan exhaust (B) - parts inspection.	Shop air.	Forced air vent / none.	Direct discharge.	Shop air.	Point source (internal).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not Applicable.
64	FPI inspection booth man cooler fan exhaust (C) - parts inspection.	Shop air.	Forced air vent / none.	Direct discharge.	Shop air.	Point source (internal).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not Applicable.
65	Compressed air R&D flow room / parts testing.	Compressed air.	Forced air vent / none.	Direct discharge.	Atmosphere.	Point source (external).	Insignificant activity. No discernable or quantifiable listed air contaminants.	Not Applicable.
66	Acetone/Laser R&D laboratory / parts testing.	Inert gases and spent acetone fume.	24 inch duct laboratory exhaust / none.	Direct discharge.	Inert gases and de minimis acetone.	Point source (external).	Insignificant activity. No discernable or quantifiable listed air contaminants. Non-HAP and VOC-Exempt Solvent.	In 2013, a total of 328.44 gallons of acetone was used shop wide.