National Aeronautics and Space Administration
John F. Kennedy Space Center
Facility ID No. 0090051
Brevard County

Title V Air Operation Permit Renewal

Permit No. 0090051-023-AV
(Renewal of Title V Air Operation Permit No. 0090051-018-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Waste & Air Resource Programs, Central District

3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Telephone: (407) 897-2930
E-mail: DEP_CD@dep.state.fl.us

Compliance Authority:

State of Florida
Department of Environmental Protection
Compliance Assurance Program, Central District

3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Telephone: (407) 897-2934
E-mail: DEP_CD@dep.state.fl.us

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Table of Contents

Section **Page Number**

I. Facility Information.
A. Facility Description. 2
B. Summary of Emissions Units. 2
C. Applicable Regulations. 2

II. Facility-wide Conditions. 4

III. Emissions Units and Conditions.
A. Hot Water Generators/Boilers. 6
B. Internal Combustion Engines. 9
C. Surface Coating Operations. 17
D. Hypergol Servicing Operations and Activities. 20
E. Portable Aggregate Material Crushing Operations 22

IV. Appendices. 24
Appendix A, Glossary.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Attachments 1-A, 2-A, 3-A, 4-A, 5-A, and 6-A
Appendix NESHAP, Subpart A – General Provisions.
Appendix NESHAP, Subpart JJJJJJ – Industrial, Commercial, and Institutional Boilers.
Appendix NSPS, Subpart A – General Provisions.
Appendix NSPS, Subpart IIII – Stationary Compression Ignition (CI) Internal Combustion Engines.
Appendix NSPS, Subpart JJJJ, Stationary Spark Ignition (SI) Internal Combustion Engines
Appendix NSPS, Subpart OOO, Nonmetallic Mineral Processing Plants
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix U, List of Unregulated Emission Units and/or Activities

Referenced Attachments. ..... At End
Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996).
Table H, Permit History.

FINAL PERMIT

PERMITTEE:
National Aeronautics and Space Administration
Mail Code AA-B
Kennedy Space Center, Florida 32889

Permit No. 0090051-023-AV
John F. Kennedy Space Center
Facility ID No. 0090051
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The John F. Kennedy Space Center is located in Brevard County at Kennedy Space Center, Florida. UTM Coordinates are: Zone 17, 534.2 km East and 3155 km North.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date: 5/24/13
Renewal Application Due Date: 10/11/2017
Expiration Date: TBD 5/24/18

F. Thomas Lubozynski, P.E.
Waste & Air Resource Programs Administrator

FTL/sa

Subsection A. Facility Description.

The National Aeronautics and Space Administration (NASA) operates the Kennedy Space Center (KSC) facility. The facility is categorized under Standard Industrial Classification Code No. 96. The facility is located in Brevard County at Kennedy Space Center, Florida. The UTM coordinates of the existing facility are Zone 17, 534.2 km East, and 3155.0 km North. KSC is a spacecraft and payload processing and launch facility which contains the following four categories of permitted air emission units:

a) Hot Water Generators/Boilers with an individual heat input of at least 10 MMBtu/hr (listed in Attachment 1-A in the appendices of this permit)

b) Surface Coating Operations (listed in Attachment 2-A in the appendices of this permit)

c) Internal Combustion Engines (listed in Attachments 3-A, 4-A and 5-A in the appendices of this permit)

d) Hypergol Fueling and Servicing Activities (listed in Attachment 6-A in the appendices of this permit)

The NASA-KSC facility permit also contains the following two emission units:

a) Portable Aggregate Material Crushing Operations, which provides for a portable aggregate crushing plant to be used at the facility.

b) Fog Fluid (Theatrical Special Effects) at KSC Visitor Complex, which is an unregulated emission unit

Subsection B. Summary of Emissions Units.

The existing facility consists of the following emissions units.

Facility ID No. 0090051

ID No.	Emission Unit Description (Regulated)
001	Hot Water Generators/Boilers with an individual heat input rate of at least 10 MMBtu/hr
086	Compression Ignition Stationary Internal Combustion Engines
087	Spark Ignition Stationary Internal Combustion Engines
088	Launch Complex 39 (LC-39) Compression Ignition Backup Power Plant
089	Hypergol Servicing Operations and Activities
091	Surface Coating Operations
092	Portable Aggregate Material Crushing Operations
ID No.	**Emission Unit Description (Unregulated)**
090	Fog Fluid (Special Effects) at Kennedy Space Center Visitor Complex

Subsection C. Applicable Regulations.

The facility is considered a Title V major source as the potential to emit (PTE) for the criteria pollutants oxides of nitrogen (NOx) and volatile organic compounds (VOC) each exceed the 100 ton per year (tpy) Title V major source threshold. The facility is considered a minor source for carbon monoxide (CO), particulate matter (PM), and sulfur dioxide (SO_2) emissions as the PTE is less than the 100 ton per year Title V major source threshold. Similarly, the facility is a minor source for lead (Pb) emissions.

The facility is considered a minor source (i.e., non-major) for the Prevention of Significant Deterioration (PSD) permitting program as the PTE for PSD pollutants is less than the PSD major source threshold (e.g., 250 tpy for CO and NO,). The facility does not belong to one of the listed source categories that have a lesser PSD major source threshold.

The total combined heat input rating for fossil fuel fired boilers at the facility is approximately 150 million British Thermal Units per hour (MMBtuhr). This total rating includes permitted (i.e., significant) and unpermitted (i.e., insignificant or exempt) units. This total rating is less than 250 MMBtuhr, which is the threshold for one of the listed source categories that have a lesser PSD major source threshold (i.e., 100 tpy for criteria pollutants).

Based on the Title V air operation permit renewal application received December 7, 2012, this facility is not a major source of hazardous air pollutants (HAPs). The facility previously was considered a major source of HAP; however, pollution prevention initiatives taken by the facility have allowed the facility to reduce HAP emissions to less than the major source thresholds of 10 tpy for individual HAP, and 25 tpy for combined HAPs.

The Title V facility does not include the retail gasoline storage and fueling operations performed on-site.

A summary of applicable regulations is shown in the following table.

Regulation	**EU No(s).**
40 CFR 60, Subpart A, NSPS General Provisions	-086 -087
40 CFR 63, Subpart A, NESHAP General Provisions	001 -086 -087 -088
40 CFR 60, Subpart IIII, Stationary Compression Ignition (CI) Internal Combustion Engines	-086 -088
40 CFR 60, Subpart JJJJ, Stationary Spark Ignition (SI) Internal Combustion Engines	-087
40 CFR 63, Subpart JJJJJJ, Industrial, Commercial, and Institutional Boilers	-001
40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)	-086 -087 -088
State Rule Citations: 62-4, 62-210.200, 62-213, 62-252, 62-296.320, 62-296.406 (BACT), and 62-297.310	all

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Facility-Wide HAP Emissions Limitation. The maximum **facility-wide** combined HAP emissions are limited to less than 25.0 tons per any consecutive twelve months and any single HAP emission is limited to less than 10.0 tons per any consecutive twelve months, updated monthly. **These limits are accepted by the applicant to make the facility a synthetic minor for HAPs only.**
[Rule 62-210.300(2)(b)1.d., F.A.C.]

FW3. HAP Emissions Calculation. HAP emissions shall be calculated using the latest published version of appropriate EPA AP-42 emission factors, other appropriate emission factors, or material balance. [Rules 62-4.160(1); FESOP 0090021-005-AF]

FW4. Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means 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 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW5. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

FW6. General Visible Emissions. Except as otherwise provided in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

FW7. Unconfined 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.
[Rule 62-296.320(4)(c), F.A.C.]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW8. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports (AORs) shall be submitted electronically to the Compliance Authority by April 1st of each year. Go to the following website for the latest information about electronic submittal of AORs:

http://www.dep.state.fl.us/air/emission/eaor/default.htm

[Rule 62-210.370(3), F.A.C.]

FW9. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rule 62-213.205, F.A.C.]

FW10. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. The submittal may be made electronically to **DEP_CD@dep.state.fl.us** [Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]

FW11. Prevention of Accidental Releases (Section 112(r) of CAA). The permittee has indicated that as of November, 2012, the facility is no longer subject to the Accidental Release Prevention Regulations and has de-registered the facilities' Risk Management Plan previously submitted. If and when the facility again becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650 or by e-mail RMPRC@epacdx.net or using RMP*eSubmit.
b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[Permit Application received 12/7/2012 and 40 CFR 68]

The specific conditions in this section apply to the following emissions unit(s):

EU No.	Brief Description
-001	Hot Water Generators / Boilers with an individual heat input rating of at least 10 MMBtu/hr. This emission unit is composed of fossil fuel fired hot water generators (HWGs) and boilers with an individual heat input rating of at least 10 MMBtu/hr. Attachment l-A is a list of the existing fossil fuel fired boilers comprising this emission unit.

Essential Potential to Emit (PTE) Parameters

A.1. Methods of Operation. Each emission unit is allowed to fire No. 2 fuel oil, diesel fuel, natural gas, propane (including liquefied propane), biodiesel, jet fuel, and synthetically derived fuel (e.g. produced by the Fischer-Tropsch process) Synthetically derived fuels include coal-to-liquid (CTL), gas-to-liquid (GTL), biomass-to-liquids (BTL), and syngas (e.g. mixture of carbon monoxide and hydrogen) [Rules 62-4.160(2), 62-204.800, 62-210.200(247), Potential to Emit, F.A.C..]

A.2. Methods of Operation Gas- fired boilers shall burn only natural gas as a primary fuel or No. 2 fuel oil as an emergency backup during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. The sulfur content of the No. 2 fuel oil shall not exceed 15 parts per million (ppm) by weight. [Rules 62-4.070(3), 62-210.200(247), Potential to Emit, and 62-213.410, F.A.C.; 40 CFR 63 Subpart JJJJJJ]

A.3. Restricted Operations Gas-fired boilers are limited to less than 48-hours per year firing fuel oil for non-emergency purposes [Rules 62-4.070(3) and 62-210.200(247), Potential to Emit, F.A.C.; 40 CFR 63 Subpart JJJJJJ]

A.4. Hours of Operation. These emission units may operate continuously (8,760 hours/year). [Rule 62-210.200(247), Potential to Emit, F.A.C., Permit No. 0090051-018-AV]

A.5. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

A.6. Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). [Rule 62-296.320(b)1.]

Monitoring of Operations

A.7. 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. [Rule 62-297.3 10(5), F.A.C.]

Test Methods and Procedures

A.8. Emissions of PM, SO2, NOx, and CO shall be estimated utilizing either:
a. EPA's AP-42 emission factors;
b. Manufacturer supplied emission factors;
c. Test data measured through the use of EPA Reference Test Methods (RTM); or,
d. An alternate method using generally accepted engineering techniques that is submitted to the FDEP for review. [Rule 62-4.070(1), F.A.C.]

A.9. Each unit shall demonstrate compliance with its visible emission limit in accordance with DEP Method 9 prior to permit expiration date if:
a. Burning gaseous fuel(s) in combination with any amount of liquid fuel(s) for 400 hours or more per year, or,
b. Burning only liquid fuel(s) for 400 hours or more per year
The test period shall be a minimum of 30 minutes or the length of the batch/cycle.
[Rules 62-297.40 1 (9)(c), 62-297.3 10(4)(a)2., 62-297.3 10(7)(a)4 .a,, F.A.C .]

A.10. At least 15 days prior to the date on which each formal compliance test is due to begin, the permittee shall provide written notification of the test to the Compliance Authority. The notification must include the following information: the date, time and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and telephone number of the person conducting the test. [Rule 62-297.310(7)(a)9, F.A.C.]

A.11. 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 impractical 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) & (2) (b), F.A.C .]

A.12. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

Recordkeeping and Reporting Requirements

A.13. Monthly Recordkeeping Requirement. In order to demonstrate compliance with Specific Conditions No. **A.1.** and **A.2,** the permittee shall maintain a log at the facility for a period of at least five (5) years from the date the data are recorded. The log, at a minimum, shall contain the following:

Monthly
a. Date (month/year);
b. Type of fuel used; and,
c. Consecutive twelve-month total of the quantity of each type of fuel combusted.

The monthly logs shall be completed by the end of the following month.

Note: A consecutive 12-month total is equal to the total for the month in question plus the totals for the eleven months previous to the month in question. A consecutive 12-month total treats each month of the year as the end of a 12-month period. A 12-month total is not a year-to-date total. Facilities or emission

units that have not been operating for 12 months should retain 12-month totals using whatever number of months of data are available until such a time as a consecutive 12-month total can be maintained each month. [Rule 62-4.070(3), F.A.C.]

A.14. The permittee shall maintain a current copy of Attachment l-A in the Appendices to this permit at facility. The facility shall update the inventory contained in Attachment l-A annually in conjunction with the AOR preparation. This inventory shall be submitted to the Department for review at the specific request of the Department. This updated copy shall include the following information for equipment meeting this heat input capacity criterion (i.e., at least 10 MMBtu/hr):

a. The current inventory of operational HWGs and boilers;
b. Listing of HWGs and boilers removed during the prior five years;
c. For each HWG and boiler, the;
1. Unique identifier (e.g., number);
2. Source location (e.g., building number);
3. Source description (e.g., manufacturer and model number);
4. Maximum heat input rating in units of MMBtu/hr;
5. Fuels the boiler is capable of firing;
6. Date of installation; and
7. Date of removal (if applicable).

A.15. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Other Requirements

A.16. If a new HWG or boiler is installed at the facility that meets the criteria of units comprising EU 001 (i.e., at least 10 MMBtu/hr heat input capacity), the permittee shall submit to the Permitting Authority one paper and one electronic copy of a construction permit application for the unit on the appropriate Department permit application forms. The permittee shall obtain a permit to construct the unit prior to the installation and operation of the unit.

A.17. After completion of construction of a new unit that is part of EU 001, the permittee shall update Attachment l-A in the Appendices to this permit. The permittee shall submit a copy of the updated Attachment 1-A to Compliance Authority within 40 days after completion of construction of the new unit. A Title V operating permit revision is not required upon completion of construction.

A.18. The permittee shall submit an updated version of Attachment l-A with Title V operating permit revision applications that address Emission Unit 001.

A.19. The permittee shall submit an updated version of Attachment l-A with each Title V operating permit renewal application.

Subsection B. Emissions Units 086, 087, and 088 Stationary Internal Combustion Engines

The specific conditions in this section apply to the following emissions unit(s):

EU No.	Brief Description
-086	Compression Ignition Stationary Internal Combustion Engines used throughout the site. For inventory tracking purposes, the compression ignition units are divided into two categories. The first category is for units that are required to be tracked as part of Emission Unit 086, as listed on Attachment 3-A in the Appendices to this permit. The first category are those engines that are either: (1) Individually have the potential to emit at least 5 tons per year of any criteria pollutant based on 500 hours per year of total engine operating hours. This threshold corresponds to 480 kilowatts (kW) for a pre-New Source Performance Standard (NSPS) engine. For NSPS subject engines, this threshold will vary based on the size and the NSPS Tier level of the engine; or, (2) Subject to the requirements of the Reciprocating Internal Combustion Engine (RICE) National Emission Standards for Hazardous Air Pollutants (NESHAP) as emergency engines involved in an electric utility demand response program. The second category involves all other stationary compression ignition RICE units at the site that are not included in the first category of EU 086 or separately permitted as a separate emission unit (e.g., E.U. 088). The following compression ignition engines are not subject to the RICE NESHAP requirements: (1) Emergency engines including (NASA qualifies for an institutional exemption); a. Stationary emergency power (e.g., for a specific building or operation); b. Fire suppression (e.g., Fire Extinguishing System [FIREX] pumps); c. Critical water deluge pumps used for launch operations; and, d. Engines used for mission critical operations during launch operations. (2) Portable engines.
-087	Spark Ignition Stationary Internal Combustion Engines used throughout the site. For inventory tracking purposes, the spark ignition units are divided into two categories. The first category is for units that are required to be tracked as part of Emission Unit 087, as listed on Attachment 4-A in the Appendices to this permit. The first category are those engines that are either: (1) Individually have the potential to emit at least 5 tons per year of any criteria pollutant based on 500 hours per year of total engine operating hours. This threshold corresponds to 690 kilowatts (kW) for a pre-New Source Performance Standard (NSPS) engine. For NSPS subject engines, this threshold will vary based on the size and the NSPS Tier level of the engine; or (2) Subject to the requirements of the Reciprocating Internal Combustion Engine (RICE)

-087	National Emission Standards for Hazardous Air Pollutants (NESHAP) as emergency engines involved in an electric utility demand response program. At the time of permit renewal (early 2013), there are no spark ignition engines that are included in the first category of this emission unit. The second category involves all other stationary spark ignition RICE units at the site. At the time of permit renewal (early 2013), there are no spark ignition engines that are included in the second category of this emission unit. The following spark ignition engines are not subject to the RICE NESHAP requirements: (1) Emergency engines including (NASA qualifies for an institutional exemption); a. Stationary emergency power (e.g., for a specific building or operation); b. Fire suppression (e.g., FIREX pumps); c. Critical water deluge pumps used for launch operations; and, d. Engines used for mission critical operations during launch operations. (2) Portable engines.
-088	Launch Complex 39 (LC-39) Compression Ignition Backup Power Plant. This emission unit includes emergency engines involved in an electric utility demand response program. These engines are subject to the RICE NESHAP as emergency engines involved in an electric utility demand response program. For inventory tracking purposes, the engines that comprise Emission Unit 088 are listed on Attachment 5-A in the Appendices to this permit.

Essential Potential to Emit (PTE) Parameters

B.1. Capacity. The annual (consecutive 12-month) fuel usage rates shall not exceed:

a. E.U. 086 - 305,000 gallons (based on diesel fuel);
b. E.U. 087 - 38,000 gallons (based on gasoline); and,
c. E.U. 088 - 170,000 gallons (based on diesel fuel).

Should alternate fuels be used in these units that are not the listed fuels in this condition, the total annual usage rates shall be based on a pro-rated basis that is based on the relative fuel heat content value of the alternate fuel.

{*Permitting Note: These fuel limits are based on normal operations. Engine operation (including fuel use) is not limited in the event of an extended emergency (e.g., hurricane response)*}.
[Rule 62-210.200(247), Potential to Emit, F.A.C. and Construction Permit No. 0090051-010-AC]

B.2. Hours of Operation.
a. E.U. 086 and 087 - Each unit is allowed to operate continuously, except as otherwise provided in this Section.
b. E.U. 088 - Total combined generator units operations shall not exceed 1,250 hours per consecutive 12-month period, except for engines subject to 40 CFR Part 63, Subpart ZZZZ (see condition **B.3**).
[Rule 62-2 10.200, (247), Potential to Emit, F. A.C ., and Title V application received 12/7/12]

B.3. Hours of Operation – Electric Utility Demand Response Program Engines.
E.U. 086 and E.U. 088 –The emergency engines included in the electric utility demand response program are each limited to a combined total of 100 hours per year, for the following purposes:

a. maintenance;
b. readiness testing;
c. emergency demand response for Energy Emergency Alert Level 2 situations,
d. responding to situations when there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency; and,
e. These emergency engines can each be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year limitation for maintenance and testing and emergency demand response conditions provided in paragraphs **B.3a.** through **B.3d.** above. Except as provided in paragraph (i) below, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or nonemergency demand response, or to generate income for a facility connected to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
(1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
(2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region;
(3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines;
(4) The power is provided only to the facility itself or to support the local transmission and distribution system; and,
(5) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[Rule 62-2 10.200, (247), Potential to Emit, F. A.C., and 40 CFR Part 60 Subpart IIII, amended January 30, 2013, and 40 CFR Part 63 Subpart ZZZZ, amended January 30, 2013]

B.4. Work or Management Practice Standards – Electric Demand Response Engines.

a. *Oil*. Unless as provided in paragraph e. below, change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63.6603 & Table 2d.4.a.]
b. *Air Cleaner*. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first and replace as necessary. [40 CFR 63.6603 & Table 2d.4.b.]
c. *Hoses and Belts*. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63.6603 & Table 2d.4.c.]
d. *Operation and Maintenance*. Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow your own maintenance plan which must provide, to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution, control practice for minimizing emissions. [40 CFR 63.6625(e), 63.6640(a) & Table 6.9.a.]

e. *Engine Startup*. During periods of startup the owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]

f. *Oil Analysis*. The owner or operator has the option of using an oil analysis program to extend the oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in paragraph **a**., above. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]

B.5. Methods of Operation.

Except as provided in Condition **B.9**, each engine in E.U. 086 and E.U. 088 is allowed to fire No. 2 fuel oil, diesel fuel, biodiesel, jet fuel, and synthetically derived fuel (e.g. produced by the Fischer-Tropsch process) Synthetically derived fuels include coal-to-liquids (CTL), gas-to-liquids (GTL), biomass-to-liquids (BTL), and syngas (e.g. mixture of carbon monoxide and hydrogen).

Except as provided in Condition **B.10,** Each engine in E.U. 087 is allowed to fire gasoline, gasoline / alcohol blends (e.g., E-10 and E-85), natural gas, propane, liquefied petroleum gas (LPG), and synthetically derived fuel (e.g. produced by the Fischer-Tropsch process). Synthetically derived fuels include coal-to-liquids (CTL), gas-to-liquids (GTL), biomass-to-liquids (BTL), and syngas (e.g. mixture of carbon monoxide and hydrogen).

Compliance

B.6. Continuous Compliance Electric Utility Demand Response Program Engines. Each electric utility demand response program engine shall be in compliance with the emission limitations and operating standards in this section at all times. [40 CFR 63.6605(a)]

B.7. Operation and Maintenance of Equipment - Electric Utility Demand Response Program Engines . At all times the owner or operator must operate and maintain, any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

Emission Limitations and Standards

B.8. Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). [Rule 62-296.320(b)1., F.A.C.]

B.9. For compression ignition internal combustion engines manufactured after April 1, 2006 (July 1, 2006 for fire pumps), or modified or reconstructed after July 11, 2005, the individual engines are subject to the requirements of the New Source Performance Standard (NSPS) contained at 40 CFR Part 60, Subpart IIII – *Standards of Performance for Stationary Compression Internal Combustion Engines*. The following requirements apply to these units:

a) Each engine shall meet the emissions criteria as stated in the regulation. Compliance with this requirement can be through any one of the following methods. Any of these methods are presumed effective for the life of the engine (i.e., one-time requirements).

i) Be certified by the engine manufacturer as meeting the standards;

ii) Based on manufacturer supplied emission test results or emission factors; or,

iii) Based on emission testing performed by the permittee.

b) Subject engines using diesel fuel shall use fuel meeting the requirements the requirements of 40 CFR §80.510(b), summarized as follows:

i) Maximum sulfur content of 15 ppm

ii) Cetane index or aromatic content of

i) A minimum cetane index of 40; or

ii) A maximum aromatic content of 35 volume percent.

For E.U. 086 and E.U. 088 –The emergency demand response program engines subject to 40 CFR Part 63, Subpart ZZZZ shall meet this requirement beginning January 1, 2015. Any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted for these engines.

c) For each emergency demand response program engine, the permittee shall install and operate a non-resettable engine hour meter.

d) For engines equipped with a diesel particulate filter, the permittee shall install and operate a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

e) The fuel certifications shall include the following information for distillate oil:

(i) The name of the oil supplier and either (ii) and (iii), or (iv) following.

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c of 40CFR 60, Subpart Dc; or

(iii) The sulfur content or maximum sulfur content of the oil; or

(iv) Documentation that the fuel is ultra low sulfur diesel (e.g., fuel delivery receipt).

The records of the fuel supplier certifications that are maintained shall represent all of the fuel oil combusted in Emissions Units 086 and 088.

[Rules 62-210.200(247), Potential to Emit and 62-4.070(3), F.A.C., and 40 CFR Part 63 Subpart ZZZZ, amended January 30, 2013]

{Permitting Note: Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17) or diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975.}

B.10. The following individual engines are subject to the requirements of the New Source Performance Standard (NSPS) contained at 40 CFR 60, Subpart JJJJ – *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines:*

- Non-emergency stationary spark ignition internal combustion engines of at least 25 hp and less than 500 hp that are manufactured after July 1, 2008,
- Non-emergency stationary spark ignition internal combustion engines of at least 500 hp that are manufactured after July 1, 2007,
- Non-emergency stationary spark ignition internal combustion engines rated less than or equal to 25 hp and manufactured after January 1, 2009,
- Emergency stationary spark ignition internal combustion engines that are manufactured after January 1, 2009, or
- Stationary spark ignition internal combustion engines modified or reconstructed after July 12, 2006.

The following requirements apply to these units:

a) Each engine shall meet the emissions criteria as stated in 40 CFR 60, Subpart JJJJ. Compliance with this requirement can be through any one of the methods. Any of these three methods are presumed effective for the life of the engine (i.e., one-time requirement)

   i) Be certified by the engine manufacturer; or,

   ii) Based on the manufacturer supplied emission test results or emission factors; or,

   iii) Based on the emission testing performed by the permittee.

b) Subject engines using gasoline fuel shall use fuel meeting the fuel sulfur limit contained in 40 CFR §80.195(a), which is summarized as a maximum of 80 ppm.

c) For the following subject engines that are used for emergency use only and do not meet the emission standards applicable to non-emergency engines; the permittee shall install a non-resettable hour meter.

   i) Greater than 500 hp and built on or after July 1, 2010;

   ii) Greater than or equal to 130 hp and less than 500 hp, and built on or after January 1, 2011; and

   iii) Less than 130 hp and built on or after July 1, 2008.

d) Engines used for emergency use are limited to 100 hours per year for operation for the purposes of maintenance checks and readiness testing. This 100 hour per year limit does not include the use of the engine in emergency situation. The permittee may request from the Department an additional 100

hours for a specific engine for other operation. This request will be made in accordance with the provisions of the NSPS.

e) The permittee shall maintain records of maintenance performed on subject engines.

B.11. Operation and Maintenance. For the engines subject to 40 CFR 60, Subpart IIII, the owner or operator must operate and maintain the stationary compression ignition internal combustion engine according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. The owner or operator must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to the owner or operator. [40 CFR 60.4211(a)]

Test Methods and Procedures

B.12. For the engines not subject to 40 CFR 60, Subpart IIII, or Subpart JJJJ, emissions of PM, SO2, NOx, and CO shall be estimated utilizing either:
a. EPA's AP-42 emission factors;
b. Manufacturer supplied emission factors;
c. Test data measured through the use of EPA Reference Test Methods (RTM); or,
d. An alternate method using generally accepted engineering techniques that is submitted to the FDEP for review. [Rule 62-4.070(1), F.A.C.]

For the engines subject to 40 CFR 60, Subpart IIII, or Subpart JJJJ, emissions of PM, SO_2, NO_x, and CO shall be estimated utilizing either:
a. Certifications (e.g., Tier II);
b. Manufacturer supplied emission factors (maximum factors, if available);
c. Performance Tests (40 CFR 60, Subpart IIII), or Subpart JJJJ;
d. EPA's AP-42 emission factors if the emission factor is not available in the above items a – c; or,
e. An alternate method using generally accepted engineering techniques that is submitted to the FDEP for review.

Each engine subject to 40 CFR 60, Subpart IIII shall be equipped with a non-resettable run time (hour) meter.

For each emergency SI engine subject to 40 CFR 60, Subpart JJJJ that does not meet the standards applicable to non-emergency engines, the engine shall be equipped with a non-resettable run time (hour) meter as specified for the following dates and power ratings:
a. Engines rated at least 500 hp and manufactured after July 1, 2010;
b. Engines rated at least 130 hp and less than 500 hp, and manufactured after January 1, 2010;
c. Engines rated at less than 130 hp and manufactured after July 1, 2008.

Each unit shall demonstrate compliance with its visible emission limit in accordance with FDEP Method 9 prior to permit expiration date if:
a) Burning gaseous fuel(s) in combination with any amount of liquid fuel(s) for 400 hours or more per year, or,
b) Burning only liquid fuel(s) for 400 hours or more per year
The test period shall be a minimum of 30 minutes or the length of the batch/cycle.
[Rules 62-297.40 1 (9)(c), 62-297.3 10(4)(a)2., 62-297.3 10(7)(a)4 .a,, F.A.C .]

B.13. At least 15 days prior to the date on which each formal compliance test is due to begin, the permittee shall provide written notification of the test to the Compliance Authority. The notification must include the

following information: the date, time and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and telephone number of the person conducting the test. [Rule 62-297.3 10(7)(a)9, F.A.C.]

B.14. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test 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 62-297.3 10(2) & (2) (b), F.A.C .]

B.15. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units when burning:
a. only gaseous fuel(s); or
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year, or
c. only liquid fuel(s) for less than 400 hours per year.
[Rule 62-297.3 10(7)(a)4 ., F.A.C .]

Monitoring of Operations

B.16. 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. [Rule 62-297.3 10(5), F.A.C.]

Compliance

B.17. Compliance Requirements. For the engines subject to 40 CFR 60, Subparts IIII and JJJJ, the permittee has indicated that compliance for these engines is demonstrated by the engines being certified according to 40 CFR Part 89 or Part 94, as applicable, for the same model year and maximum engine power. [40 CFR 60.4211(b)]

Recordkeeping Requirements

B.18. Monthly Recordkeeping Requirement. In order to demonstrate compliance with Specific Conditions No. **B.1., B.2.** and **B.3,** the permittee shall maintain a log at the facility for a period of at least five (5) years from the date the data are recorded. The log, at a minimum, shall contain the following:

Monthly
a. Date (month/year);
b. Type of fuel used;
c. Consecutive 12-month total of the quantity of each fuel type combusted for each individual EU (E.U. 086, 087, and 088); and
d. Consecutive 12-month total of operational hours for the engines comprising E.U. 088.

The monthly logs shall be completed by the end of the following month.

Note: A consecutive 12-month total is equal to the total for the month in question plus the totals for the eleven months previous to the month in question. A consecutive 12-month total treats each month of the year as the end of a 12-month period. A 12-month total is not a year-to-date total. Facilities or emission units that have not been operating for 12 months should retain 12-month totals using whatever number of months of data are available until such a time as a consecutive 12-month total can be maintained each month. [Rule 62-4.070(3), F.A.C.]

B.19. The permittee shall maintain a current copy of Attachment 3-A, Attachment 4-A, and Attachment 5-A located in the appendices of this permit at the facility. The facility shall update the inventory contained in Attachment 3-A, Attachment 4-A, and Attachment 5-A annually in conjunction with the AOR preparation. This inventory shall be submitted to the FDEP for review at the specific request of FDEP.

B.20. Record Retention.

a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

B.21. Notification, Performance and Compliance Records. For the demand response engines subject to 40 CFR Part 63, Subpart ZZZZ the owner or operator must keep:

a. A copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted.
b. Records of the occurrence and duration of each malfunction of operation.
c. Records of all required maintenance performed on the hour meter.
d. Records of actions taken during periods of malfunction to minimize emissions in accordance with Specific Condition **B.7.**, including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation.
e. Records of the actions required in specific condition **B.4.d.** to show continuous compliance with each emission limitation or operating requirement.
f. Records of the Work or Management Practice Standards specified in Specific Condition **B.4.**
g. Records of the maintenance conducted in order to demonstrate that the RICE was operated and maintained according to your own maintenance plan.
h. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for emergency demand response operation or for periods of voltage or frequency deviations, the owner or operator must keep records of the notification of the emergency situation, and the time of engine operation for these purposes.

[40 CFR 63.6655]

Reporting Requirements

B.22. For E.U. 086 and E.U. 088 – For the demand response engines subject to 40 CFR Part 43, Subpart ZZZZ, the permittee shall submit an annual report according to the following requirements.

a. The report must contain the following information:
   i. Company name and address where the engine is located.
   ii. Date of the report and beginning and ending dates of the reporting period.

iii. Engine site rating and model year.
iv. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
v. Hours operated for the purposes of either emergency demand response for Energy Emergency Alert Level 2 situations, or responding to situations when there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency, including the date, start time, and end time for engine operation for these purposes.
vi. Number of hours the engine is contractually obligated to be available for the purposes of either emergency demand response for Energy Emergency Alert Level 2 situations, or responding to situations when there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
vii. Hours spent for operation for non-emergency situations as specified in Condition **B.3.d**., including the date, start time, and end time for engine operation for these purposes. The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

b. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
c. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to U.S. EPA Region IV and the Compliance Authority.
d. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Specific Condition **B.4.**, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.
e. [Rule 62-204.800, F.A.C.and 40 CFR Part 63, Subpart ZZZZ, amended January 30, 2013, Table 2d, footnote 2]

Permit Application

B.23. For new internal combustion engines installed at the facility that meet the criteria of units required to be listed in Attachment 3-A and Attachment 4-A in the Appendices of this permit (i.e., individually has a potential to emit of greater than 5 tons per year of a criteria pollutant or subject to the RICE NESHAP as an emergency engine involved in an electric demand response program), the Permittee shall submit to the Permitting Authority one hard copy and one electronic copy of a construction permit application for the unit on the appropriate FDEP permit application forms (e .g., FDEP Form No. 62-2 10.900(1)). The permittee shall obtain a permit to construct the unit prior to the installation and operation of the unit.

B.24. The permittee shall submit an updated version of Attachment 3-A in the Appendices of this permit with Title V operating permit revision applications that address Emission Unit 086.

B.25. The permittee shall submit an updated version of Attachment 4-A in the Appendices of this permit with Title V operating permit revision applications that address Emission Unit 087.

B.26. The permittee shall submit an updated version of Attachment 5-A in the Appendices of this permit with Title V operating permit revision applications that address Emission Unit 088.

B.27. The permittee shall submit updated versions of Attachment 3-A, Attachment 4-A, and Attachment 5-A in the Appendices of this permit with each Title V operating permit renewal application.

Subsection C. The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
-091	This emission unit is comprised of surface coating operations performed in paint booths or similar structures located at the facility.

C.1. Attachment 2-A in the Appendices of this permit is a list of the existing operations that comprise this unit. As required in Condition No. **C.9.**, the permittee shall maintain and update a copy of Attachment 2-A at the facility. This updated copy shall include the following information for equipment comprising this Emission Unit:

a. The current inventory of operational paint booths and similar structures comprising this emission unit;

b. Listing of paint booths and similar structures removed from this emission unit during the prior five years;

c. For each paint booth or similar structure, the;

1. Unique identifier (e.g., number);
2. Source location (e.g., building number);
3. Source description (e.g., Corrosion Control Booth Number 1);
4. Manufacturer and model number (if applicable);
5. Type of particulate matter control (e.g., filters or water wall);
6. Date of installation (if installed after June 1, 2008); and
7. Date of removal (if applicable, and if removed after June 2008).

C.2. Hours of Operation. Each unit is allowed to operate continuously. [Rule 62-2 10.200, (247), Potential to Emit), F.A.C .]

Emission Limitations and Standards

C.3. The permitted VOC emission rate from Emission Unit 091 is limited to less than 69.0 tons per year per consecutive twelve months, including the emissions from the air drying of empty cans and excess two-part epoxy paints prior to their disposal. Usage or purchasing records shall be maintained as provided in Specific Conditions No. **C.6**. **and C.7.** [Rule 62-296.320(b)1.]

C.4. The combined HAP emission rate from EU 091 is limited to less than 20.0 tons per any consecutive twelve months and single HAP emissions are limited to less than 8.0 tons per any consecutive twelve months, updated monthly. Usage or purchasing records shall be maintained as provided in Specific Conditions No. **C.6**. **and C.7.**

C.5. Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). [Rule 62-296.320(b)1.]

Recordkeeping and Reporting Requirements

C.6. Emissions of VOC and HAP from this emission unit shall be estimated monthly utilizing any one or combination of the following methods:

a. Material balance approach based on either:

1. Purchase data; or
2. Usage data;

b. VOC and HAP content as obtained from any of the following methods:
1. MSDS;
2. Manufacturer data (e.g., certified product data sheet);
3. As analytically measured using generally accepted methods; or,
4. Using default values (e.g., 7.38 lbs/gallon VOC) for low use materials.

c. An alternate method using generally accepted engineering techniques that is submitted to the FDEP for review.

Monthly logs shall be completed by the end of the following month. The logs and supporting documents shall be maintained at the facility for at least 5 years and made available to the Department upon request. [Rule 62-4.070(1), F.A.C.]

C.7. Monthly Recordkeeping Requirement. In order to demonstrate compliance with Specific Conditions No. **C.3.** and **C.4,** the permittee shall maintain a log at the facility for a period of at least five (5) years from the date the data are recorded. The log, at a minimum, shall contain the following:

Monthly
a. Date (month/year);
b. Consecutive 12-month total of VOC emissions
c. Consecutive 12-month total of total HAP emissions and;
d. Consecutive 12-month total of individual HAP emissions for each individual HAP with emissions of at least 0.5 tons during the current twelve-month period.

The monthly logs shall be completed by the end of the following month.

Note: A consecutive 12-month total is equal to the total for the month in question plus the totals for the eleven months previous to the month in question. A consecutive 12-month total treats each month of the year as the end of a 12-month period. A 12-month total is not a year-to-date total. Facilities or emission units that have not been operating for 12 months should retain 12-month totals using whatever number of months of data are available until such a time as a consecutive 12-month total can be maintained each month. [Rule 62-4.070(3), F.A.C.]

Logs must document the method, calculations, and formulas used in determining the usage rate and the emission rate. This includes, but is not limited to, the product name, density, individual and total HAP contents, and individual and total VOC content. All calculations, including those used to derive emission credits for mass balance, must be clearly documented and may be presented in the form of a template of sample calculations, which is filed with the logs required in this specific condition and available for review on site by regulatory inspectors. [Rule 62-4.070(3), F.A.C.]

C.8. The permittee shall maintain a current version of Attachment 2-A in the Appendices of this permit, at the facility. The facility shall update the inventory contained in Attachment 2-A annually in conjunction with the AOR preparation. This inventory shall be submitted to the FDEP for review at the specific request of the Department.

Permit Application

C.9. If a new paint booth or similar structure is installed at the facility that meets the criteria of units comprising EU 091, the permittee shall submit to the Permitting Authority one hard copy and one electronic copy of a construction permit application for the unit on the appropriate FDEP permit application forms (e.g., FDEP Form No. 62-210.900(1)). The permittee shall obtain a permit to construct the unit prior to the installation and operation of the unit.

C.10. After completion of construction of a new unit that is part of EU 091, the permittee shall update Attachment 2-A. The permittee shall submit a copy of the updated Attachment 2-A to the Compliance Authority within 60 days after completion of construction of the new unit. A Title V operating permit revision is not required upon completion of construction.

C.11. The permittee shall submit an updated version of Attachment 2-A in the Appendices of this permit with Title V operating permit revision applications that address Emission Unit 091.

C.12. The permittee shall submit an updated version of Attachment 2-A with each Title V operating permit renewal application.

Subsection D. The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
-089	This emission unit is comprised of hypergol servicing operations and activities. These operations include fueling operations, purging, fume hoods and scrubbers located at the facility.

D.1. Attachment 6-A is a list of the existing operations that comprise this unit. As required in Condition No. **D.4**., the permittee shall maintain and update a copy of Attachment 6-A in the appendices of this permit at the facility. This updated copy shall include the following information for equipment comprising this Emission Unit:

a. The current inventory of operations and activities comprising this emission unit;
b. Listing of operations and activities removed from this emission unit during the prior five years; and,
c. For each operations and activity, the;
1. Unique identifier (e.g., number);
2. Source location (e.g., building number); and,
3. Source description (e.g., manufacturer and model number)

D.2. Hours of Operation. Each unit is allowed to operate continuously.

Emission Limitations and Standards

D.3. Visible Emissions. The visible emission limitation for hypergol servicing operations and activities shall be one hundred (100) percent opacity.

{*Permitting Note: Given the 100 percent VE limit for this emission unit, compliance is inherent. Hence periodic VE testing is not required*}

Recordkeeping and Reporting Requirements

D.4. The permittee shall maintain a current copy of Attachment 6-A in the Appendices of this permit at facility. The facility shall update the inventory contained in Attachment 6-A annually in conjunction with the AOR preparation. This inventory shall be submitted to the FDEP for review at the specific request of FDEP.

Permit Application

D.5. Construction permits are not required for the installation and operation of hypergol servicing operations and activities such as fueling operations, purging, and fume hoods. See Condition numbers **D.4, D.8,** and **D.9.** for recordkeeping requirements associated with the installation and operations of new hypergol servicing operations and activities.

D.6. For the installation and operation of a new hypergol scrubbing system, the permittee shall submit to the Permitting Authority one hard copy and one electronic copy of a construction permit application for the unit on the appropriate FDEP permit application forms (e.g., FDEP Form No. 62-210.900(1)). The permittee shall obtain a permit to construct the unit prior to the installation and operation of the unit.

D.7. After completion of construction of a new scrubber that is part of EU 089, the permittee shall update Attachment 6-A in the Appendices of this permit. The permittee shall submit a copy of the updated Attachment 6-A to Compliance Authority within 60 days after completion of construction of the new unit. A Title V operating permit revision is not required upon completion of construction.

D.8. The permittee shall submit an updated version of Attachment 6-A with Title V operating permit revision applications that address Emission Unit 091.

D.9. The permittee shall submit an updated version of Attachment 6-A with each Title V operating permit renewal application.

Subsection E. The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
-092	This emission unit provides for the operation of a portable material crushing operation. This portable material crushing operation will be used to recycle a variety of construction materials (e.g., concrete and porcelain plumbing fixtures such as sinks and toilets).

E.1. General Recordkeeping Requirements - The permittee shall keep records for each crushing system operated on site as follows:

a. Owner Name;

b. General and Title V Air Operation Permit number(s) (e.g., 7771234-XXX-AX) and permit effective date(s);

c. Latest arrival date on site;

d. Manufacturer's maximum rated capacity for any material; and

e. Date of most recent visible emissions (VE) test and a copy of the test report. The test report shall include the permitted capacity of the crusher and the actual operating rate of the crusher.

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

E.2. Hours of Operation. Each unit is allowed to operate continuously. [Rule 62-2 10.200, (247), Potential to Emit, F.A.C .]

E.3. Visible Emission (VE) Limitation: Visible emissions from any crusher, grinding mill, screening operation, bucket elevator, transfer point on belt conveyors, bagging operation, storage bin, enclosed truck or railcar loading station, or any other emission point not subject to 40 CFR 60, Subpart OOO, shall be less than 20 percent opacity.
[Rule 62-296.320(4)(b)1., F.A.C.]

E.4. Additional VE Limitations: Visible emissions from any crusher, grinding mill, screening operation, bucket elevator, transfer point on belt conveyors, bagging operation, storage bin, enclosed truck or railcar loading station, or any other emission point subject to 40 CFR 60, Subpart OOO, shall comply with the following opacity limits:

Pollutant	With Capture System (opacity)	Without Capture System (opacity)
VE	10 percent	15 percent

[40 CFR 60 Subpart OOO and adopted by reference in Rule 62-204.800(8)(b), F.A.C.]

E.5. Unconfined Emissions of Particulate Matter: Unconfined emissions shall be controlled by using a water suppression system with spray bars located wherever unconfined emissions occur at the feeder, the entrance and exit of the crusher, screen, and the conveyor drop points.
[Rule 62-296.320(4)(c), F.A.C.]

E.6. Test Reports: If the Department requests to see a recent valid emission test report (does not have to be tested at the site) for a crusher, the test report shall be submitted to the Department no later than 14 days from the date requested by the Department.
[Rule 62-4.070(3), F.A.C.]

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Attachments 1-A, 2-A, 3-A, 4-A, 5-A, and 6-A.
Appendix NESHAP, Subpart A – General Provisions.
Appendix NESHAP, Subpart JJJJJJ – Industrial, Commercial, and Institutional Boilers.
Appendix NESHAP Subppart ZZZZZ - Stationary Reciprocating Internal Combustion Engines (RICE)
Appendix NSPS, Subpart A – General Provisions.
Appendix NSPS, Subpart IIII – Stationary Compression Ignition (CI) Internal Combustion Engines.
Appendix NSPS, Subpart JJJJ, Stationary Spark Ignition (SI) Internal Combustion Engines.
Appendix NSPS, Subpart OOO, Nonmetallic Mineral Processing Plants
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix U, List of Unregulated Emission Units and/or Activities.