

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

Title V Air Operation Permit RenewalRevision

Permit No. 0090051-0402-AV

(Renewal^{1st} Revision of Title V Air Operation Permit No. 0090051-03340-AV)



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Division of Air Resource Management
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Title V Air Operation Permit Renewal/Revision

Permit No. 0090051-0402-AV

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Appendices

- Appendix NESHAP 40 CFR 63, Subpart A - MACT General Provisions (Version Dated 11/19/2020).
- Appendix NESHAP 40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) (Version Dated 11/19/2019).
- Appendix NESHAP 40 CFR 63, Subpart CCCCCC ("6C") - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities (Version Dated 11/19/2020).
- Appendix NESHAP 40 CFR 63, Subpart WWWWWW ("6W") - National Emission Standards for Plating and Polishing Operations (Version Dated 11/19/2020).
- Appendix NSPS 40 CFR 60, Subpart A - General Provisions (Version Dated 10/07/2020).
- Appendix NSPS 40 CFR 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants (Version Dated 04/28/2009).
- Appendix NSPS 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (Version Dated 11/13/2019).
- Appendix NSPS 40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (Version Dated 01/18/2008).
- Appendix A, Abbreviations, Acronyms, Citations and Identification Numbers (Version Dated 05/09/2011).
- Appendix I, List of Insignificant Emissions Units and/or Activities.
- Appendix RR, Facility-wide Reporting Requirements (Version Dated 08/08/2019).
- Appendix TR, Facility-wide Testing Requirements (Version Dated 05/21/2019).
- Appendix TV, Title V General Conditions (Version Dated 02/16/2012).

Referenced Attachments. At End of Appendices Document

- Attachments 2-A, 3-A, 4-A, 5-A, 6-A, 7-A, 8-A, 9-A and 10-A.
- Table H, Permit History.



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PERMITTEE:

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Kennedy Space Center (KSC)
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Permit No. 0090051-0402-AV
The John F. Kennedy Space Center
Facility ID No. 0090051
Title V Air Operation Permit Revision

The purpose of this permit is to revise the Title V air operation permit for the above referenced facility. The existing The John F. Kennedy Space Center is in Brevard County at Kennedy Space Center, Florida, Florida. UTM Coordinates are: Zone 17, 534.2 km East, and 3155.0 km North (Latitude 28° 31' 22" North and Longitude is 80° 38' 49" West).

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 and 62-213. The above-named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Executed in Tallahassee, Florida.

0090051-042-AV Effective Date: [ARMS Day 46]

0090051-040-AV Effective Date: November 2, 2021

Renewal Application Due Date: March 22, 2026

Expiration Date: November 2, 2026

(Draft)

David Lyle Read, P.E., Environmental Administrator SES
Permit Review Section
Division of Air Resource Management

DLR/sms

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SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

This existing facility, National Aeronautics and Space Administration (NASA) operates the Kennedy Space Center (KSC) facility. The facility is categorized under Standard Industrial Classification Code No. 9661 and North American Industry Classification System Code No. 927110. 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. NASA-KSC is a spacecraft and payload processing and launch facility which contains the following six categories of permitted air emission units:

- a) Surface Coating Operations, EU101 (listed in Attachment 1-A);
- b) Internal Combustion Engines, EU102, EU103, EU104, EU105, (listed in Attachments 2-A, 3-A, 4-A, 5-A) used for both emergency and non-emergency purposes;
- c) Chromate Conversion Operation, EU106 (listed in Attachment 6-A);
- d) Portable Aggregate Material Crushing Operations, which provides for a portable aggregate crushing plant to be used at the facility, EU107, (listed in Attachment 7-A). The portable crushing unit must have its own air permit (Rule 62-210.310(2), F.A.C.);
- e) Emergency Stationary Spark Ignition RICE subject to NSPS 40 CFR 60 Subpart JJJJ. EU108 (listed in Attachment 8-A); and
- f) Gasoline Dispensing Operations, EU109 (listed in Attachment 9-A).

Also at the facility are miscellaneous insignificant emissions units and/or activities.

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Subsection B. Summary of Emissions Units.

EU No.	Brief Description
<i>Regulated Emissions Units</i>	
101	Surface Coating Operations
102	Non-Emergency Stationary Compression Ignition (CI) Reciprocating Internal Combustion Engines (RICE) subject to NESHAP 40 CFR 63 Subpart ZZZZ
103	Emergency Stationary CI RICE subject to NSPS 40 CFR 60 Subpart IIII
104	Non-Emergency Stationary CI RICE subject to NSPS 40 CFR 60 Subpart IIII
105	Emergency Fire Pump CI RICE Subject to NSPS 40 CFR 60 Subpart IIII
106	Chromate Conversion Operation subject to NESHAP 40 CFR 63 Subpart WWWW (6W)
107	Portable Material Crushing Operation subject to NSPS 40 CFR 60 Subpart OOO
108	Emergency Stationary Spark Ignition RICE subject to NSPS 40 CFR 60 Subpart JJJJ
109	Gas Dispensing Operations subject to NESHAP 40 CFR 63 Subpart CCCCC

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see Appendix I, List of Insignificant Emissions Units and/or Activities).

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Subsection C. Applicable Requirements.

Based on the Title V air operation permit renewal application received July 7, 2021, this facility is not a major source of hazardous air pollutants (HAP). This facility is not classified as a Prevention of Significant Deterioration (PSD) major stationary source in accordance with Rule 62-212.400, F.A.C.

A summary of important applicable requirements is shown in the following table.

Applicable Requirement	EU No(s).
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SECTION I. FACILITY INFORMATION.

40 CFR 60, Subpart A, Standards of Performance for New Stationary Sources (NSPS) General Provisions	103, 104, 105, 107, 108
40 CFR Part 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants	107
40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	103, 104, 105
40 CFR 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	108
40 CFR 63, Subpart A, NESHAP (a.k.a. MACT) General Provisions	102, 103, 104, 107, 108
40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)	102, 103, 104, 105
40 CFR 63, Subpart CCCCCC ("6C") - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	109
40 CFR 63, Subpart WWWW ("6W") - National Emission Standards for Plating and Polishing Operations	106
Rule 62-210.300, F.A.C., Permits Required	All 'regulated' EUs

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SECTION II. FACILITY-WIDE CONDITIONS.

The following conditions apply facility-wide to all emissions 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. HAP Emissions Calculation. HAP emissions shall be calculated using the latest published version of appropriate U.S. EPA AP-42 emission factors, other appropriate emission factors, or material balance. [Rules 62-4.160(1); and, FESOP Permit No. 0090021-005-AF.]

FW3. 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.]

FW4. 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.]

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW5. General 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 equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), F.A.C.]

FW6. 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. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- a. Restricted speed limits on unpaved roads;
- b. Application of water as needed during construction activities;
- c. Confining of abrasive blasting operations;
- d. Providing enclosure or canopy covering for material stockpiling and transportation to the extent practical;
- e. Confining or enclosing, to the extent practical, activities (such as outdoors blasting) that may cause considerable airborne particulate matter emissions; and,
- f. To the extent practical, surface coating operations are performed in one of several permitted paint booths located on KSC. Painting outside of paint booths, inorganic zinc application and outdoor surface coating of structures and ground support equipment (GSE), utilizes engineering controls such as tarpaulins, or erected enclosures to reduce emissions of unconfined particulate matter.

[Rule 62-296.320(4)(c), F.A.C.; proposed by applicant in the Title V air operation permit renewal application received on July 7, 2021.]

Reports and Fees

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

FW7. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection’s Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP’s Electronic Annual Operating Report

SECTION II. FACILITY-WIDE CONDITIONS.

(EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070**. Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: <https://floridadep.gov/air/permitting-compliance/content/title-v-fees>. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013).]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: <http://www.dep.state.fl.us/air/emission/eaor>. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.}

FW8. 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 and to the US. EPA at the address shown below within 60 days after the end of each calendar year during which the Title V air operation permit was effective. (See also Appendix RR, Conditions RR1 and RR7.) [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303

FW9. Prevention of Accidental Releases (Section 112(r) of CAA). If, and when, the facility becomes subject to Section 112(r), of the Clean Air Act, 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 electronically through EPA's Central Data Exchange system at the following address: <https://cdx.epa.gov>. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: <http://www2.epa.gov/rmp>. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.
- 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.

[40 CFR 68]

FW10. Semi-Annual Reports. The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports at least every six months to the compliance office. Each semi-annual report shall cover the 6-month periods of January 1 - June 30 and July 1 - December 31. The reports shall be submitted by the 60th day following the end of each calendar half (i.e., March 1st and August 29th of every year). All instances of deviations from permit requirements (including conditions in the referenced Appendices) must be clearly identified in such reports, including reference to the specific requirement and the

SECTION II. FACILITY-WIDE CONDITIONS.

duration of such deviation. If there are no deviations during the reporting period, the report shall so indicate. Any semi-annual reporting requirements contained in applicable federal NSPS or NESHAP requirements may be submitted as part of this report. The submittal dates specified above shall replace the submittal dates specified in the federal rules. All additional reports submitted as part of this report should be clearly identified according to the specific federal requirement. All reports shall include a certification by a responsible official, pursuant to subsection 62-213.420(4), F.A.C. (See also Conditions RR2. – RR4. of Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements related to deviations.) [Rule 62-213.440(1)(b)3.a., F.A.C.; and, 40 CFR 60.19, 40 CFR 61.10 & 40 CFR 63.10.]

{Permitting Note: EPA has clarified that, pursuant to 40 CFR 70.6(a)(3), the word “monitoring” is used in a broad sense and means monitoring (i.e., paying attention to) the compliance of the source with all emissions limitations, standards, and work practices specified in the permit.}

In addition, each submittal must include the following:

- a. Updated permit attachments 2-A, 3-A, 4-A, 5-A, 6-A, 7-A, 8-A, 9-A and 10-A.
- b. A list of engines that are planned to be constructed during the upcoming 12 months.

[Condition RR4 and Rule 62-213.440(1)(b)3.a., F.A.C.]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 101

Surface Coating Operations

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

EU No.	Brief Description
101	Surface Coating Operations

Detailed Description:

This emissions unit is comprised of surface coating operations performed in paint booths or similar structures located throughout the facility. For inventory tracking purposes, the units that comprise EU 101 are listed in **Attachment 1-A** of this permit. The most recent list shall be included in the latest Semi-Annual Monitoring Report.

Air Pollution Control Systems and Measures:

Paint booths comprising this EU typically have mat or panel filters that control particulate matter emissions.

Stack Parameters:

This information is for paint booth exhaust stacks. The stack exhaust information for a typical paint booth exhaust are as follows: exhaust gas temperature of 77° F; exhaust gas flow rate 17,500 acfm; stack height of 32 ft; and, stack diameter of 3.5 feet.

{Permitting Notes: This emission unit is regulated under: Rule 62-210.300, F.A.C., Permits Required.}

Essential Potential to Emit (PTE) Parameters

A.1. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200, PTE, F.A.C.; and, Permit No. 0090051-032-AC.]

Recordkeeping and Reporting Requirements

A.2. Monthly Recordkeeping Requirement. 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.

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.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 101

Surface Coating Operations

[Rule 62-4.070(1)&(3), F.A.C.]

A.3. VOCs/HAPs Emissions. Emissions of VOCs and HAPs from this emissions 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) Safety Data Sheet (SDS);
 - 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 VOC/gallon) for low use materials.
- c. An alternate method using generally accepted engineering techniques that is submitted to the FDEP for review.

[Rule 62-4.070(1)&(3), F.A.C.]

A.4. Inventory. The permittee shall maintain an up-to-date version of **Attachment 1-A** at the facility. This updated copy shall include the following information for equipment comprising this EU:

- a. The current inventory of operational paint booths and similar structures comprising this emissions unit;
- b. Listing of paint booths and similar structures removed from this emissions unit during the prior five years;
- c. For each paint booth or similar structure:
 - 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 August 1, 2016); and
 - 7) Date of removal (if applicable, and if removed after August 1, 2016)

[Rule 62-4.070(1)&(3), F.A.C.]

A.5. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emission Units 102

Non-Emergency Stationary Compression Ignition (CI) Reciprocating Internal Combustion Engines (RICE)

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

EU No.	Brief Description
102	Non-Emergency Stationary Compression Ignition (CI) Reciprocating Internal Combustion Engines (RICE) subject to NESHAP 40 CFR 63 Subpart ZZZZ

Detailed Description:

Non-Emergency Stationary Compression Ignition (CI) Reciprocating Internal Combustion Engines (RICE) subject to *National Emission Standards for Hazardous Air Pollutants for Stationary Compression Ignition Internal Combustion Engines (NESHAP) 40 CFR 63 Subpart ZZZZ*. This EU is comprised of non-emergency stationary CI RICE located throughout the site, that have been manufactured before April 1, 2006 (July 1, 2006 for fire pumps), or modified or reconstructed before July 11, 2005. These non-emergency diesel-fired stationary engines are subject to the requirements of NESHAP 40 CFR 63, Subpart ZZZZ.

The current list of engines under this EU includes non-emergency engines that participate in the Florida Power and Light (FPL) Commercial/Industrial Load Control (CILC) Program. The CILC engines have installed oxidation catalyst to control carbon monoxide (CO) emissions.

This EU also includes two 60 kilowatt (kW) (each) non-emergency CI RICE, located at in Blast Building #2 at the Corrosion Control area of KSC. There are no CO emission limits that are applicable to these CI RICE; the engines only have to meet work practice requirements of 40 CFR 63, Subpart ZZZZ.

For inventory tracking purposes, the engines that comprise EU 102 are listed in **Attachment 2-A** of this permit. The most recent list is included in the latest Semi-Annual Monitoring Report (Condition FW9.)

Air Pollution Control Systems and Measures:

CO Oxidation Catalyst for CILC-participating engines (5 LC-39, 2 Press Site, 2 CD&SC).

Stack Parameters:

Varies.

{Permitting Notes: These CI RICE are regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800(11)(b), F.A.C. The CILC engines are considered "existing" non-emergency stationary CI RICE greater than 500 HP that are located at an area source of HAP. These RICE are not subject to regulations under 40 CFR 60, Subpart IIII - New Source Performance for Stationary Internal Combustion Engines (ICE) based on their manufacturer date.}

Essential Potential to Emit (PTE) Parameters

B.1. Hours of Operation. These units may operate continuously (8,760 hours/year). [Rule 62-210.200, Potential to Emit, F.A.C.; and, Permit No. 0090051-032-AC.]

B.2. Potential to Emit. Potential to emit calculations for this emission unit were based on 250 hours per year per engine of engine operating hours. The assumed 250-hours per year usage of each engine is based on a review of site-specific operational records, CILC agreement requirements, historic usage data, and applicable maintenance job plans. [Rule 62-210.200, Potential to Emit, F.A.C.]
{Permitting Note: Engine operation (including operating hour use) is not limited in the event of an extended emergency (e.g., hurricane response)}

B.3. Authorized Fuel. These non-emergency stationary CI RICE must use diesel fuel that meets the following requirements for non-road diesel fuel:

- a. **Sulfur Content.** The sulfur content shall not exceed 15 ppm or 0.0015% by weight (i.e., ultra-low sulfur diesel specifications for non-road fuel).

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emission Units 102

Non-Emergency Stationary Compression Ignition (CI) Reciprocating Internal Combustion Engines (RICE)

- b. *Cetane and Aromatic*. The fuel must have a minimum cetane index of 40 or a maximum aromatic content of 35% by volume.

[40 CFR 63.6604(a) and 40 CFR 80.510(b); and, Permit No. 0090051-033-AC.]

Emission Limitations and Standards

B.4. CO Emissions. The owner or operator must comply with either of the following CO limitations that apply to non-emergency engines located at Area Sources of HAPs:

- a. Limit concentration of CO in the stationary RICE exhaust as follows:

- 1) 49 parts per million by volume, dry basis at 15% oxygen (O₂) for engines $300 \leq \text{Hp} \leq 500$ HP or reduce CO emissions by at least 70%.
- 2) 23 parts per million by volume, dry basis at 15 % O₂ for engines rated at > 500 HP; or reduce CO emissions by at least 70%.
- 3) No limits apply for engines that are less than (<) 300 horsepower (HP) in size.

[40 CFR 63.6640 Table 2d.]

Operation and Monitoring Requirements

B.5. Oxidation Catalyst Use. Where an oxidation catalyst is used to comply with the CO limitation contained in Condition **B.4**, (such as the CILC engines), the permittee must:

- a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the most recent performance test during operations when the engines are providing back-up power; or,
- b. Maintain each catalyst so that the pressure drop across the catalyst is within the established operating range developed for each engine during operations for maintenance checks and readiness testing; and,
- c. Maintain the temperature of each stationary RICE exhaust so that the catalyst inlet temperature (4- hour rolling average) is greater than or equal to 450°F and less than or equal to 1,350°F during normal operation.

[40 CFR 63.6640 Table 2b; and, NASA KSC Site Specific RICE NESHAP Oxidation Catalyst Pressure Drop Monitoring Plan (July 30, 2014).]

B.6. Continuous Parameter Monitoring System (CPMS). The permittee has installed a continuous parameter monitoring system (CPMS) on the CILC engines that use oxidation catalyst in accordance with Table 5 of 40 CFR 63, Subpart ZZZZ. Each CPMS must be installed, operated, and maintained according to the requirements in 40 CFR 63.6625(b)(1) through (6) and as specified below.

- a. The owner or operator must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (1) through (5) of this section and in §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (1) through (5) of this section in your site-specific monitoring plan.
 - 1) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
 - 2) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;
 - 3) Equipment performance evaluations, system accuracy audits, or other audit procedures;
 - 4) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and
 - 5) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).

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- b. Each CPMS must be installed, operated, and maintained in continuous operation according to the procedures in the site-specific monitoring plan.
- c. The CPMS must collect data at least once every 15 minutes (see also §63.6635).
- d. For a CPMS used for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 % of the measurement range, whichever is larger.
- e. The CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan must be conducted at least annually.
- f. A performance evaluation of each CPMS must be conducted in accordance with your site-specific monitoring plan.

[40 CFR 63.6625(b).]

{Permitting Note: The permittee has submitted a CPMS site-specific monitoring plan dated November 13, 2013.}

B.7. Continuous Monitoring and Data Collection. In order to comply with the emission and operating limitations, the owner or operator must monitor and collect data in accordance with the following:

- a. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- b. You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

[40 CFR 63.6635.]

B.8. Continuous Compliance Demonstration. The owner or operator must demonstrate continuous compliance with the emission limitation contained in Condition **B.4** and the operation limitation contained in Condition **B.5** by:

- a. Collecting the catalyst inlet temperature data according to Condition **B.6.c** (every 15-minutes)
- b. Reducing these data to 4-hour rolling averages for normal operation times;
- c. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
- d. Measuring the pressure drop across the catalyst once per month (if the engine is operated) and demonstrating that the pressure drop across the catalyst is within the operating limitation established for the specific engine per the site-specific oxidation catalyst pressure drop monitoring plan.

[40 CFR 63.6640 Table 6; and, NASA KSC Site Specific RICE NESHAP Oxidation Catalyst Pressure Drop Monitoring Plan (July 30, 2014).]

B.9. Closed Crankcase Ventilation System. For engines with a closed crankcase ventilation system, the owner and operator must follow the manufacturer's specified maintenance requirements for operating and maintaining the closed crankcase ventilation systems and replacing the crankcase ventilation filters.

[40CFR 63.6625(g)(1).]

B.10. Operation and Maintenance of Equipment. At all times the owner or operator must operate and maintain any affected source, including any 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,

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review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b).]

B.11. Operation at Idle and Startup Conditions. During periods of startup the owner or operator 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 (i.e., normal operation) emission limitations contained in Condition **B.4** and operational limitations in Condition **B.5** apply. [40 CFR 63.6640 Table 2d.]

B.12. Hour Meter. Each engine must have a non-resettable hour meter. [40 CFR 63.6625(f).]

Test Methods and Procedures

B.13. Compliance Tests. The permittee must conduct performance tests according to Conditions **B.15** through **B.19** for each non-emergency CI RICE engine that is greater than 300 HP. The testing must be completed within 8,760 hours of operation from the last test or within 3 years of the date of the last test, whichever comes first. [40 CFR 63.6612 Table 3.]

{Permitting Note: The permittee conducted the initial performance test on these engines in March, 2014.}

B.14. Compliance Tests after Catalyst Maintenance or Change.

a. When catalyst maintenance is performed, the following must be demonstrated within 60 days. Catalyst maintenance includes cleaning (i.e., the same catalyst bed is removed, cleaned, and then reinstalled).

- 1) Operating Temperature. Demonstrate operating temperature between 450°F and 1,350°F.
- 2) Operating Pressure. The permittee shall either:

- a) Demonstrate the differential pressure during an engine run is within the established operating pressure curve for the engine; or,
- b) Reestablish the acceptable operating pressure drop range for the engine by:
 - i. Developing a revised operating curve; or
 - ii. Identifying the rationale for the revised curve; and,
 - iii. Providing this curve and rationale to the FDEP for review and comment.

b. When the catalyst is changed, the permittee must reestablish the pressure operating curve during the compliance demonstration testing according to Conditions **B.15** thru **B.19** within 60 days of changing the catalyst.

[40 CFR 63.6612(a), Table 4 and Table 5; 40 CFR 63.6640(b); and, Rule 62-297.310(7), F.A.C.]

B.15. Test Requirements. The permittee must conduct three separate test runs for each performance test required in this section. Unless otherwise approved by the FDEP, each test run must last at least 1 hour. Tests shall be conducted in accordance with the applicable requirements specified in Appendix TR (Facility-Wide Requirements) of this permit. The permittee may suggest an alternate testing procedure to provide a balance of:

- a. A reasonable number of test runs;
- b. Reasonable duration of each run;
- c. Allowance for abbreviated tests for engines of the same make and model; and;
- d. Establishing or re-establishing an operating pressure range for a range of engine loads.

[40 CFR 63.6620(d) and Rule 62-297.310, F.A.C.; and, NASA KSC Site Specific RICE NESHAP Oxidation Catalyst Pressure Drop Monitoring Plan (July 30, 2014).]

B.16. Measurements to Determine O₂ and CO.

- a. Measurements to determine O₂: The owner or operator must measure the O₂ at the inlet and outlet of the control device in accordance with Method 3, 3A, or 3B of 40 CFR Part 60 Appendix A, or using a portable CO and O₂ analyzer according to the ASTM D6522-00 (2005) (incorporated by reference, see 40 CFR 63.14) requirements. Measurements to determine O₂

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must be made at the same time as the measurements for CO concentration. Methods 3A and 10 may also be used as options to ASTM–D6522–00 (2005).

- b. Measurements to determine CO: The owner or operator must measure the CO at the inlet and the outlet of the control device using a portable CO and O₂ analyzer according to the ASTM D6522–00 (2005) (incorporated by reference, see 40 CFR 63.14) or Method 10 of 40 CFR Part 60 Appendix A requirements. The CO concentration must be normalized to 15% O₂, dry basis. Methods 3A and 10 may also be used as options to ASTM–D6522–00 (2005). Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348–03 may also be used.
- c. Sample port location and number of traverse points: The owner or operator must select sample port locations and the number of traverse points in accordance with Method 1 or 1A of 40 CFR Part 60 Appendix A. The sampling site must be located at the outlet of the oxidation catalyst device.
- d. Measurements to determine moisture content: The owner or operator must measure the moisture content of each stationary RICE exhaust at the sample port location in accordance with Method 4 of 40 CFR Part 60 Appendix A, or Test Method 320 of 40 CFR Part 63 Appendix A according to the ASTM D6348–03 (incorporated by reference, see 40 CFR 63.14) requirements.

[40 CFR 63.6620 Table 4(1).]

B.17. Percent Reduction of CO Determination. Percent reduction of CO must be determined using the following equation:

$$\frac{c_i - c_o}{c_i} \times 100 = R$$

Where:

- C_i = concentration of carbon monoxide (CO), at the control device inlet,
- C_o = concentration of CO, at the control device outlet, and
- R = percent reduction of CO emissions

[40 CFR 63.6620(e)(1).]

B.18. Inlet and Outlet Normalization of CO Concentrations. The CO concentrations at the inlet and outlet of the control device must be normalized to a dry basis and to 15% oxygen, or an equivalent percent carbon dioxide (CO₂). If pollutant concentrations are to be corrected to 15% oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate the CO₂ correction factor as described in the following equations:

- a. Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

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

Where:

- F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO₂ volume produced by the fuel at zero % excess air.
- 0.209 = Fraction of air that is oxygen, percent/100.
- F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm³/J (dscf/10⁶ Btu)
- F_c = Ratio of the volume of CO₂ produced to the gross calorific value of the fuel from Method 19, dsm³/J (dscf/10⁶ Btu)

- b. Calculate the CO₂ correction factor for correcting measurement data to 15% O₂, using the following equation:

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$$X_{CO_2} = \frac{5.9}{F_o} \quad (\text{Eq. 3})$$

Where:

x_{CO_2} = CO₂ concentration correction factor, percent.

5.9 = 20.9% O₂ – 15% O₂, the defined O₂ correction value, percent.

- c. Calculate the CO gas concentrations adjusted to 15% O₂ correction value, using the following equation:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \quad (\text{Eq. 4})$$

Where:

C_{adj} = adjusted concentration of CO

x_{CO_2} = calculated concentration of CO adjusted to 15% O₂.

C_d = measured concentration of CO uncorrected.

x_{CO_2} = CO₂ correction factor, percent.

$\%CO_2$ = Measured CO₂ concentration measured, dry basis, percent.

[40 CFR 63.6620(e)(2).]

- B.19. Determination of Engine Load.** The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, and strain gauges are used, the model number of the measurement device, and an estimate of its accuracy in percentage of true value must be provided.

[40 CFR 63.6620(i).]

Notification Requirements

B.20. Notification about the Catalyst.

- a. You must notify the Department at least 30 days before performing routine maintenance on the catalyst, or, as soon as possible, when it is emergency maintenance. Catalyst maintenance includes cleaning (removed, cleaned and then reinstalled).
- b. You must notify the Department at least 30 days before replacing the catalyst, or, as soon as possible, when the replacement is an emergency.

See **B.14** regarding required testing. [40 CFR 63.6640(b) and 63.6650.]

- B.21. Notification of Deviations from Limitations.** The owner or operator must report each instance when an emission limitation or operating limitation contained in this permit was not met. These instances are deviations from the emission and operating limitations in this permit. These deviations must be reported according to the requirements in Condition **B.29**. [40 CFR 63.6650.]

- B.22. Notification of Intent to Conduct a Performance Test.** The owner or operator must submit a Notification of Intent to conduct a performance test required by 40 CFR 63 Subpart ZZZZ at least 60 days before the performance test is scheduled to begin, as required in 40 CFR 63.7(b)(1) and a separate notification at least 15 days prior to the scheduled test date [Appendix TR, Item TR7(9)]. The Notification shall be made to the Compliance Authority (**DEP_CD@dep.state.fl.us**). The notification must include the following information:

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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. [40 CFR 63.6645(g).]

- B.23. Notification of Compliance Status.** Owners or operators required to conduct a compliance demonstration must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(3).
- For each compliance demonstration required in Condition **B.14.a** that does not include a performance test, the owner or operator must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.
 - For each compliance demonstration required in Conditions **B.13** and **B.14.b** that includes a performance test, the owner or operator must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR 63.10(d)(2).

[40 CFR 63.6645(h).]

- B.24. Additional Notification Requirements:** The owner or operator must submit all of the notifications in accordance with:

- §63.7(b) Notification of Performance Test;
- §63.7(c) Quality Assurance Program;
- §63.8(e) Conduction of Performance Test;
- §63.8(f)(4) Use of Alternative Test Methods;
- §63.8(f)(6) and 63.9(b) Initial Notifications;
- §63.9(c) Request for Extension of Compliance;
- §63.9(d) Notification that source is subject to special compliance requirements;
- §63.9(e) Notification of Performance Test;
- §63.9(g) Additional Notification requirements for sources with continuous monitoring systems; and
- §63.9(h) Notification of Compliance Status by the dates specified in each Rule.

[40 CFR 63.6645(a) and 40 CFR 63 Subpart A.]

Recordkeeping Requirements

- B.25. Record Retention.**

- The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
- 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.26. Notification, Performance, and Compliance Records.** The owner or operator must keep:

- A copy of each notification and report that the owner or operator submitted to comply with this Subsection, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted.
- Records of the occurrence and duration of each malfunction of operation.
- Records of all required maintenance performed on on the air pollution control and monitoring equipment (such as the hour meter).
- Records of actions taken during periods of malfunction to minimize emissions in accordance with Specific Condition **B.10**, including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation.
- For each CPMS, you must keep the records listed items 1) through 3) below.

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- 1) Records described in §63.10(b)(2)(vi) through (xi); including:
 - i. Each period during which a CPMS is malfunctioning or inoperative (including out-of-control periods);
 - ii. All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CPMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);
 - iii. All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;
 - iv. All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
 - v. All CMS calibration checks; and,
 - vi. All adjustments and maintenance performed on CMS
 - 2) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
- f. Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

[40 CFR 63.6655.]

B.27. Monthly Recordkeeping Requirement. The permittee shall maintain a monthly 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:

- a. Date (month/year);
- b. Type of fuel used in each permitted engine at the facility; and,
- c. Certification from the fuel supplier in accordance with Condition **B.28**

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

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

B.28. Fuel Certification Requirements: The fuel certifications shall include the following information for distillate oil (i.e., No. 2 fuel oil):

- a. The name of the oil supplier and either (b) and (c), or (d) following.
- b. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c of 40 CFR 60, Subpart Dc; and
- c. The sulfur content or maximum sulfur content of the oil; or
- d. 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 Emission Unit 102.

{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.}

Reporting Requirements

B.29. Compliance Report. The owner or operator must submit semiannual Compliance Reports for engines in this emission unit according to the following requirements:

- a. Each semiannual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31 and must be postmarked or delivered no later than August 30 or February 28 whichever date is the first date following the end of the semiannual reporting period.
- b. The Compliance Report must contain the following information:

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- 1) Company name and address.
 - 2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
 - 3) Date of report and beginning and ending dates of the reporting period.
 - 4) If you had a deviation or malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a deviation or malfunction of an affected source to minimize emissions in accordance with Specific Condition **B.10**, including actions taken to correct a malfunction.
 - 5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.
 - 6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period. Link to 40 CFR 63.8: <http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=5da53a158d187990195161c0be320dcc&rgn=div5&view=text&node=40:10.0.1.1.1&idno=40#40:10.0.1.1.1.5.8>
- c. For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CPMS to comply with the emission and operating limitations in 40 CFR 63.6650 you must include information in paragraphs C.29.b.1) through 4), above, and C.29.c.1) through 12), below.
- 1) The date and time that each malfunction started and stopped.
 - 2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.
 - 3) The date, time, and duration that each CMS was out-of-control, including the information in § 63.8(c)(8).
 - 4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.
 - 5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
 - 6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
 - 7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
 - 8) An identification of each parameter and pollutant (CO) that was monitored at the stationary RICE.
 - 9) A brief description of the stationary RICE.
 - 10) A brief description of the CMS.
 - 11) The date of the latest CMS certification or audit.
 - 12) A description of any changes in CMS, processes, or controls since the last reporting period.
- d. If you submit a Compliance Report pursuant to this specific condition along with, or as part of, the semiannual monitoring report required in Appendix RR of this Title V Air Operation Permit and the semiannual monitoring report includes all required information in this specific

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condition, submission of the semiannual monitoring report shall be deemed to satisfy any obligation to report the same deviations and malfunctions in a semiannual Compliance Report required by this specific condition. However, submission of a compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

[40 CFR 63.6650(a) - (f) and Table 7.]

NESHAP 40 CFR 63, Subpart A & ZZZZ Requirements

B.30. 40 CFR 63 Requirements - Subpart A. These emissions units shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C. and attached to this permit as **Appendix 40 CFR 63 Subpart A**, except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which these emissions are subject to are found at 40 CFR 63.6665. [Rule 62-204.800(11)(d)1., F.A.C.]

B.31. 40 CFR 63 Requirements - Subpart ZZZZ. These emissions units shall comply with all applicable requirements of 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), which have been adopted by reference in Rule 62-204.800(11)(b), F.A.C., and attached to this permit as **Appendix 40 CFR 63 Subpart ZZZZ**. [Rule 62-204.800(11)(b), F.A.C.]

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Subsection C. Emissions Unit 103

Emergency Stationary CI RICE subject to NSPS 40 CFR 60 Subpart IIII

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

EU No.	Brief Description
103	Emergency Stationary CI RICE subject to NSPS 40 CFR 60 Subpart IIII

Detailed Description:

Emergency Stationary CI RICE subject to NSPS 40 CFR 60 Subpart IIII. This EU is comprised of emergency (non-fire pump) stationary CI engines that were manufactured after April 1, 2006, or modified or reconstructed after July 11, 2005, located throughout the site. All of these emergency stationary diesel engines are subject to the requirements of the *NSPS 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, adopted in Rule 62.204.800 F.A.C. They are considered to be regulated; they are not insignificant, exempt, or non-regulated. In order to facilitate inventory tracking, Fire Pumps subject to NSPS Subpart IIII are addressed separately under EU 105 (as requested by the permittee).

For inventory tracking purposes, the emergency engines that comprise EU 103 are listed in **Attachment 3-A** of this permit. The most recent list is included in the latest Semi-Annual Monitoring Report (Condition FW9.).

Air Pollution Control Systems and Measures:

EPA-certified Tier engines as necessary to meet the applicable emission standards in NSPS Subpart IIII.

Stack Parameters:

Varies.

{Permitting Note: These existing emergency stationary CI RICE that are located at the site are not subject to RICE NESHAP requirements as NASA qualifies for an institutional exemption as provided in 40 CFR 63, Subpart ZZZZ, § 63.6585(f)(3). These engines are regulated under 40 CFR 60, Subpart IIII, NSPS for Compression Ignition Internal Combustion Engines (CIICE).}

Essential Potential to Emit (PTE) Parameters

- C.1. Authorized Fuel.** If diesel fuel is used, it must meet the following requirements for non-road diesel fuel:
- a. *Sulfur Content.* The sulfur content shall not exceed 15 ppm = 0.0015% by weight (ultra-low sulfur) for non-road fuel.
 - b. *Cetane and Aromatic.* The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.
- [40 CFR 60.4207(b) and 40 CFR 80.510(b).]

- C.2. Methods of Operation.** Each engine is allowed to fire No. 2 fuel oil, or diesel fuel,. [Rule 62-210.200, Potential to Emit; and, Permit No. 0090051-032-AC.]

- C.3. Potential to Emit.** Potential to emit calculations for this emission unit shall be were based on 150 hours per year of engine operating hours. The assumed 150 hours per year usage of each engine is based on a review of site-specific operational records, historic usage data, and applicable maintenance job plans. [Rule 62-210.200, Potential to Emit, F. A.C.]

{Permitting Note: Engine operation (including operating hour use) is not limited in the event of an extended emergency (e.g., hurricane response)}

- C.4. Restricted Hours of Operation.** The following hour limitations apply individually to each engine:
- a. *Emergency Situations.* There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 60.4211(f)(1).]
 - b. *Maintenance and Testing.* Each engine is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit 103

Emergency Stationary CI RICE subject to NSPS 40 CFR 60 Subpart IIII

Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 60.4211(f)(2)(i).]

- c. *Non-emergency Situations.* Each engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4211(f)(3).]

Emission Limitations and Standards

C.5. Emission Standards. Each CI RICE shall meet the emissions limitations as stated in the appropriate NSPS Subpart IIII Tier limitations which are applicable to the engine (40 CFR 60.4205(b) and 89.112 Table 1). 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):

- a. Be certified by the engine manufacturer as meeting the standards;
- b. Based on manufacturer supplied emission test results or emission factors; or,
- c. Based on emission testing performed by the permittee.

{Permitting Note: The Permittee has indicated that compliance for these engines that are subject to 40 CFR 60, Subpart IIII 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.}

Monitoring Requirements

C.6. Hour Meter. The owner or operator must install a non-resettable hour meter on each engine if one is not already installed. [40 CFR 60.4209(a).]

C.7. Backpressure Monitor. 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. [40 CFR 60.4209(b).]

C.8. Operation and Maintenance. The owner or operator must operate and maintain the stationary CI RICE according to the manufacturer's emissions-related 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).]

Testing and Compliance Requirements

C.9. Compliance Requirements Due to Loss of Certification. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:

- a. For engines rated at less than 100 HP (< 100 HP); keep a maintenance plan and records of maintenance conducted to demonstrate compliance and maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. Emissions testing is not required unless:
 - 1) The permittee does not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or
 - 2) The permittee changes the emission-related settings in a way that is not permitted by the manufacturer.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit 103

Emergency Stationary CI RICE subject to NSPS 40 CFR 60 Subpart IIII

If testing is required, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action. No subsequent performance testing is required.

- b. For engines rated greater than or equal to 100 HP and less than or equal to 500 HP ($100 \text{ HP} \leq \text{Engine HP} \leq 500 \text{ HP}$), keep a maintenance plan and records of conducted maintenance and maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. Initial performance testing is required within 1 year of startup, or within 1 year after an engine or control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after emission-related settings are changed in a way that is not permitted by the manufacturer.
- c. For engines rated at greater than 500 HP ($>500 \text{ HP}$), keep a maintenance plan and records of conducted maintenance and maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. Initial performance testing is required within 1 year of startup, or within 1 year after an engine or control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. Periodic performance testing is required every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with applicable emission standards. [40 CFR 60.4211(g)(3).]

Test Methods and Procedures

C.10. Emissions of PM, SO₂, 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),
- 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.

[Rules 62-297.401(9)(c), 62-297.3 10(4)(a)2., 62-297.3 10(7)(a)4.a, F.A.C.]

Recordkeeping Requirements

C.11. Monthly Recordkeeping Requirement. In order to demonstrate compliance with the limits on non-emergency hours of operation, the permittee shall document the hours and type of non-emergency operation for each engine in this EU, as applicable per 40 CFR 60.4214(b), in a monthly log at the facility for at least five (5) years from the date the data are recorded. The log, at a minimum, shall contain the following:

- a. Date (month/year);
- b. Amount of each type of fuel used for EU 103;
- c. Amount of hours and type of non-emergency operation for each engine in this EU,
- d. Consecutive 12-month total of the quantity of each fuel type combusted in EU 103. Should fuels other than diesel fuel be used in these engines, the consecutive 12-month usage rates shall be calculated on a pro-rated basis that is based on the relative fuel heat content value of the alternate fuel(s) expressed as gallons of diesel fuel.

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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit 103

Emergency Stationary CI RICE subject to NSPS 40 CFR 60 Subpart IIII

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.]

C.12. Fuel Certification Requirements. The fuel certifications shall include the following information for distillate oil (i.e., No. 2 fuel oil, diesel oil, biodiesel):

- a. The name of the oil supplier and either (b) and (c), or (d) following.
- b. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c of 40 CFR 60, Subpart Dc; and
- c. The sulfur content or maximum sulfur content of the oil; or
- d. 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 EU 103. [Rules 62-210.200, Potential to Emit and 62-4.070(3), F.A.C.]

{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.}

C.13. 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).]

C.14. Permit Application. This emissions unit applies to existing Stationary CI RICE units subject to 40 CFR 60 Subpart IIII.

a. Air Construction Permit Requirement:

- i. For stationary CI RICE units that are being added, modified, or reconstructed, the categorical exemption from requiring an Air Construction Permit for Stationary Reciprocating Internal Combustion Engines (62-210.300(3)(a)35, F.A.C.) shall apply as long as the applicable exemption fuel usage thresholds (e.g., 64,000 gallons of diesel annually or equivalent amount for other fuels) are not exceeded.
- ii. If the fuel threshold will be exceeded, the Permittee will be required to obtain a Construction Permit for each stationary CI RICE unit being added, modified, or reconstructed.

- b. Modification of Title V Permit Requirement: If the stationary CI RICE is subject to an applicable requirement (in this case 40 CFR 60 Subpart IIII), the RICE will be required to be incorporated into the Title V Operation Permit within 180-days of commencing operation, through the submittal of a Title V Permit Revision application in accordance with Rule 62-213.420(1)(a)3, F.A.C.

The facility will notify the Department of any units utilizing the fuel threshold exemption and will provide an updated list of engines with the latest Semi-Annual Monitoring Report (Condition Error! Reference source not found.) The Permittee will evaluate the threshold status of its fuel usages for engines claiming the categorical exemption relevant to the exemption threshold status annually based upon data compiled and submitted with the AOR.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit 103

Emergency Stationary CI RICE subject to NSPS 40 CFR 60 Subpart IIII

NSPS 40 CFR 60, Subpart A & IIII Requirements

C.15. NSPS 40 CFR 60 Requirements - Subpart A. These engines shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions including:

- 40 CFR 60.7, Notification and Recordkeeping
- 40 CFR 60.8, Performance Tests
- 40 CFR 60.11, Compliance with Standards and Maintenance Requirements
- 40 CFR 60.12, Circumvention
- 40 CFR 60.13, Monitoring Requirements
- 40 CFR 60.19, General Notification and Reporting requirements

adopted by reference in Rule 62-204.800(8)(c), F.A.C. and attached to this permit as **Appendix 40 CFR 60 Subpart A**, except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. [Rule 62-204.800(8)(d), F.A.C.]

C.16. 40 CFR 60 Requirements - Subpart IIII. These engines shall comply with all applicable requirements of 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, which have been adopted by reference in Rule 62- 204.800(8)(b), F.A.C., and attached to this permit as **Appendix 40 CFR 60 Subpart IIII**. [Rule 62-204.800(8)(b), F.A.C.]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Emission Units 104

Non-Emergency Stationary CI RICE Subject to NSPS 40 CFR 60 Subpart III

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

EU No.	Brief Description
104	Non-Emergency Stationary CI RICE Subject to NSPS 40 CFR 60 Subpart III

Non-Emergency Stationary CI RICE Subject to NSPS 40 CFR 60 Subpart III. This EU is comprised of non-emergency stationary CI RICE manufactured after April 1, 2006, or modified or reconstructed after July 11, 2005, located throughout the site. All of these non-emergency stationary CI RICE are subject to the requirements of the NSPS 40 CFR 60, Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, adopted in Rule 62.204.800(8)(b), F.A.C. The engines are considered to be regulated; they are not insignificant, exempt, or non-regulated.

For inventory tracking purposes, the units that comprise EU 104 are listed in **Attachment 4-A** of this permit. The most recent list is included in the latest Semi-Annual Monitoring Report.

Air Pollution Control Systems and Measures:

The facility uses EPA-certified Tier engines or add-on emission controls as necessary to meet applicable NSPS 40 CFR 60 Subpart III emission standards. The new non-emergency fire pump engine at the Pad B Pump House is a Tier 4 EPA-certified engine.

Stack Parameters:

Varies.

{Permitting Note: These compression ignition reciprocating internal combustion engine (CI RICE) are regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE and 40 CFR 60, Subpart III, NSPS for Stationary Compression Ignition RICE, adopted in Rules 62.204.800(11)(b) and (8)(b), F.A.C., respectively. They are considered "new" stationary non-emergency CI RICE with a displacement of less than 10 liters per cylinder, located at an area source of HAP, that have been modified, reconstructed or commenced construction on or after 6/12/2006, and that have a post-2007 model year. In accordance with provisions of 40 CFR 63.6590(c)(6), meeting the requirements of 40 CFR 60, Subpart III, satisfies compliance with the requirements of 40 CFR 63, Subpart ZZZZ.}

Essential Potential to Emit (PTE) Parameters

- D.1. Authorized Fuel.** If diesel fuel is used, it must meet the following requirements for non-road diesel fuel:
- a. *Sulfur Content.* The sulfur content shall not exceed 15 ppm = 0.0015% by weight (ultra-low sulfur) for non-road fuel.
 - b. *Cetane and Aromatic.* The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b), 80.510(b).]

- D.2. Potential to Emit.** Potential to emit calculations for this emission unit was based on 250 hours per year of engine operating hours. The assumed 250 hours per year were based on a review site-specific operational records, CILC agreement requirements, historic usage data, and applicable maintenance job plans. [Rule 62-210.200, Potential to Emit, F.A.C.]

{Permitting Note: Engine operation (including hour use) is not limited in the event of an extended emergency (e.g., hurricane response).}

Emission Limitations and Standards

- D.3. Emission Standards.** Emissions from the 1.25 MW engine shall not exceed the following NSPS Tier 4i limitations:

- a. NO_x Emissions. Emissions of NO_x shall not exceed 0.67 g/KW-hr.
- b. NMHC Emissions. Emissions of NMHC shall not exceed 0.4 g/KW-hr.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Emission Units 104

Non-Emergency Stationary CI RICE Subject to NSPS 40 CFR 60 Subpart IIII

- c. CO Emissions. CO emissions shall not exceed 3.5 g/KW-hr.
- d. PM Emissions. PM emissions shall not exceed 0.1 g/KW-hr.

[40 CFR 60.4205(b) and 89.112 Table 1.]

D.4. Emission Standards. Emissions from the reconstructed Vacuum System CI RICE shall meet the emissions limitations as stated in the appropriate NSPS Subpart IIII Tier limitations which are applicable to the engine (40 CFR 60.4204(b) and 89.112 Table 1). 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):

- a. Certified by the engine manufacturer as meeting the standards;
- b. Based on manufacturer supplied emission test results or emission factors; or,
- c. Based on emissions testing performed by the permittee.

{Permitting Note: The Permittee has indicated that compliance for future added engines that are subject to 40 CFR 60, Subpart IIII will be 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 or through emissions testing.}

Operation and Monitoring Requirements

D.5. Operation and Maintenance. The owner or operator must operate and maintain the stationary combustion 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 the manufacturer authorizes to be changed. This engine must be maintained and operated to meet the emissions limits in Specific Conditions **D.3** or **D.4** over the entire life of the engine. [40 CFR 60.4206, 4211(a)(1), (2) and (3).]

D.6. Engine Certification Requirements. The owner or operator complies with the emissions standards specified above by having purchased an engine certified by the manufacturer to meet those limits. The engine must have been installed and configured, as well as, continued to be maintained, according to the manufacturer's emission-related specifications, except as permitted in Specific Condition **D.10**. [40 CFR 60.4211(c).]

D.7. Hour Meter. The owner or operator must properly maintain the installed non-resettable hour meter. [40 CFR 60.4209(a).]

Test Methods and Procedures

D.8. Compliance Requirements Due to Loss of Certification. If the owner or operator does not install, configure, operate, and maintain the engine or control device according to the manufacturer's emission-related written instructions, or if the owner or operator changes emission-related settings in a way that is not authorized by the manufacturer, the owner or operator must demonstrate compliance by the following four actions:

- a. The owner or operator must keep a maintenance plan and records of conducted maintenance.
- b. The owner or operator must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- c. In addition, the owner or operator must conduct an initial performance test to demonstrate compliance with the applicable emission standards:
 - 1) within 1 year of startup, or
 - 2) within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or
 - 3) within 1 year after you change emission-related settings in a way that is not authorized by the manufacturer.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Emission Units 104

Non-Emergency Stationary CI RICE Subject to NSPS 40 CFR 60 Subpart IIII

- d. The owner or operator must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards in Specific Condition **D.4**.

[40 CFR 60.4211(g)(3).]

D.9. Testing Requirements. In the event performance tests are required pursuant to Specific Condition **D.8**, the following requirements shall be met:

- a. *Testing Procedures.* The performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1039, Subpart F.
- b. *Not to Exceed (NTE) Numerical Requirements.* Exhaust emissions from these engines must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in Specific Condition **D.4**, determined from the following equation:

NTE Numerical Requirement for Each Pollutant = (1.25) x (applicable standard from **D.3**)

[40 CFR 60.4212(a) and (c).]

D.10. Test Requirements: In the event performance tests are required pursuant to Specific Condition **D.8**, or as otherwise requested by FDEP, tests shall be conducted in accordance with the applicable requirements specified in Specific condition **D.9** and Appendix TR (Facility Wide Testing Requirements) of this permit.
[Rule 62-297.310, F.A.C.]

Notification Requirements

D.11. Test Notification: In the event performance tests are required pursuant to Specific Condition **D.8**, or as otherwise requested by the Compliance Authority, the permittee shall notify the Compliance Authority 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 permittee. [Rule 62-297.310(7)(a)9., F.A.C.]

Recordkeeping Requirements

D.12. Maintenance Records. To demonstrate conformance with the manufacturer's written instructions for maintaining the certified engine and to document when compliance testing must be performed pursuant to Specific Condition **D.8**, the owner or operator must keep the following records:

- a. Engine manufacturer data indicating compliance with the standards.
- b. A copy of the manufacturer's written instructions for operation and maintenance of the certified engine.
- c. A written maintenance log detailing the date and type of maintenance performed on the engine, as well as any deviations from the manufacturer's written instructions. The log may be kept and maintained electronically.

[Rule 62-213.440(1), F.A.C.]

D.13. Monthly Recordkeeping Requirement. The permittee shall maintain a monthly 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:

- a. Date (month/year);
- b. Type of fuel used;
- c. Certification from the fuel supplier. The fuel certifications shall include the following information for distillate oil:
- 1) The name of the oil supplier and either 2) and 3), or 4) following.
 - 2) 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; and
 - 3) The sulfur content or maximum sulfur content of the oil; or
 - 4) Documentation that the fuel is ultra low sulfur diesel (e.g., fuel delivery receipt).

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Emission Units 104

Non-Emergency Stationary CI RICE Subject to NSPS 40 CFR 60 Subpart IIII

- d. Consecutive 12-month total of the quantity of each fuel type combusted for permitted engines at the facility including engines listed in EU 104; and,
- e. Consecutive 12-month total of operational hours for permitted engines at the facility including engines comprising EU 104

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. and 40 CFR 60.4214; and, Permit 0090051-026-AC.]

Permit Application

D.14. Permit Application. This emissions unit applies to existing Stationary CI RICE units subject to 40 CFR 60 Subpart IIII.

a. Air Construction Permit Requirement:

- i. For stationary CI RICE units that are being added, modified, or reconstructed, the categorical exemption from requiring an Air Construction Permit for Stationary Reciprocating Internal Combustion Engines (62-210.300(3)(a)35, F.A.C.) shall apply as long as the applicable exemption fuel usage thresholds (e.g., 64,000 gallons of diesel annually or equivalent amount for other fuels) are not exceeded.
- ii. If the fuel threshold will be exceeded, the Permittee will be required to obtain a Construction Permit for each stationary CI RICE unit being added, modified, or reconstructed.

b. Modification of Title V Permit Requirement: If the stationary CI RICE is subject to an applicable requirement (in this case 40 CFR 60 Subpart IIII), the RICE will be required to be incorporated into the Title V Operation Permit within 180-days of commencing operation, through the submittal of a Title V Permit Revision application in accordance with Rule 62-213.420(1)(a)3, F.A.C.

The facility will notify the Department of any units utilizing the fuel threshold exemption and will provide an updated list of engines with the latest Semi-Annual Monitoring Report (Condition Error! Reference source not found.). The Permittee will evaluate the threshold status of its fuel usages for engines claiming the categorical exemption relevant to the exemption threshold status annually based upon data compiled and submitted with the AOR.

NESHAP 40 CFR 63, Subpart A & ZZZZ Requirements

D.15. 40 CFR 63 Requirements - Subpart A. These emissions units shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C. and attached to this permit as **Appendix 40 CFR 63 Subpart A**, except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which these emissions are subject to are found at 40 CFR 63.6665. [Rule 62-204.800(11)(d)1., F.A.C.]

D.16. 40 CFR 63 Requirements - Subpart ZZZZ. These emissions units shall comply with all applicable requirements of 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), which have been adopted by reference in Rule

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Emission Units 104

Non-Emergency Stationary CI RICE Subject to NSPS 40 CFR 60 Subpart IIII

62-204.800(11)(b), F.A.C., and attached to this permit as **Appendix 40 CFR 63 Subpart ZZZZ** [Rule 62-204.800(11)(b), F.A.C.]

NSPS 40 CFR 60, Subpart A & IIII Requirements

D.17. NSPS 40 CFR 60 Requirements - Subpart A. These engines shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions including:

40 CFR 60.7, Notification and Recordkeeping

40 CFR 60.8, Performance Tests

40 CFR 60.11, Compliance with Standards and Maintenance

Requirements 40 CFR 60.12, Circumvention

40 CFR 60.13, Monitoring Requirements

40 CFR 60.19, General Notification and Reporting requirements adopted by reference in Rule 62-204.800(8)(c), F.A.C. and attached to this permit as **Appendix 40 CFR 60 Subpart A**, except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. [Rule 62-204.800(8)(d), F.A.C.]

D.18. 40 CFR 60 Requirements - Subpart IIII. These engines shall comply with all applicable requirements of 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, which have been adopted by reference in Rule 62-204.800(8)(b), F.A.C., and attached to this permit as **Appendix 40 CFR 60 Subpart IIII**. [Rule 62-204.800(8)(b), F.A.C.]

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Subsection E. Emissions Unit 105

Emergency Fire Pump CI RICE Subject to NSPS 40 CFR 60 Subpart IIII

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

EU No.	Brief Description
105	Emergency Fire Pump CI RICE Subject to NSPS 40 CFR 60 Subpart IIII

Detailed Description:

Emergency Fire Pump CI RICE Subject to NSPS 40 CFR 60 Subpart IIII. This EU is comprised of emergency fire pump CI engines manufactured after July 1, 2006, or modified or reconstructed after July 11, 2005, located throughout the site. All of these emergency stationary fire pump engines are subject to EPA's Tiered emission standards of the *NSPS 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, adopted in Rule 62.204.800 F.A.C. The engines are considered to be regulated; they are not insignificant, exempt, or non-regulated.

For inventory tracking purposes, the engines that comprise EU 105 are listed in **Attachment 5-A** of this permit. The most recent list is included in the latest Semi-Annual Monitoring Report.

Air Pollution Control Systems and Measures:

Facility is using EPA-certified Tier engines as necessary to meet applicable emission standards in NSPS 40 CFR 60 Subpart IIII.

Stack Parameters:

Varies.

{Permitting Notes: This EU is regulated under NSPS 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. These existing emergency stationary CI RICE that are located at the site are not subject to RICE NESHAP requirements as NASA qualifies for an institutional exemption as provided in 40 CFR 63, Subpart ZZZZ, § 63.6585(f)(3).}

Essential Potential to Emit (PTE) Parameters

- E.1. Authorized Fuel.** If diesel fuel is used, it must meet the following requirements for non-road diesel fuel:
- a. *Sulfur Content.* The sulfur content shall not exceed 15 ppm = 0.0015% by weight (ultra low sulfur) for non-road fuel.
 - b. *Cetane and Aromatic.* The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b), 40 CFR 80.510(b).]

- E.2. Methods of Operation.** Each engine is allowed to fire No. 2 fuel oil or diesel fuel. [Rule 62-210.200, Potential to Emit, F.A.C.; and, Permit 0090051-032-AC.]

- E.3. Potential to Emit.** Potential to emit calculations for this emission unit shall be based on 150 hours per year of engine operating hours. The assumed 150 hours per year usage of each engine is based on a review of site-specific operational records, historic usage data, and applicable maintenance job plans. [Rule 62-210.200, Potential to Emit, F.A.C.]

{Permitting Note: Engine operation (including operating hour use) is not limited in the event of an extended emergency (e.g., hurricane response)}

- E.4. Restricted Hours of Operation.** The following hour limitations apply individually to each engine:
- a. *Emergency Situations.* There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 60.4211(f)(1).]
 - b. *Maintenance and Testing.* Each engine is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection E. Emissions Unit 105

Emergency Fire Pump CI RICE Subject to NSPS 40 CFR 60 Subpart IIII

Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 60.4211(f)(2)(i).]

- c. *Non-emergency Situations.* Each engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4211(f)(3).]

Emission Limitations and Standards

E.5. Emission Standards. Each CI RICE shall meet the emissions limitations as stated in the appropriate NSPS Subpart IIII Tier limitations which are applicable to the engine (40 CFR 60.4205(b) and 89.112 Table 1). 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):

- d. Be certified by the engine manufacturer as meeting the standards;
- e. Based on manufacturer supplied emission test results or emission factors; or,
- f. Based on emission testing performed by the permittee.

{Permitting Note: The Permittee has indicated that compliance for these engines that are subject to 40 CFR 60, Subpart IIII 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.}

Monitoring Requirements

E.6. Hour Meter. The owner or operator must install a non-resettable hour meter on each engine if one is not already installed. [40 CFR 60.4209(a).]

E.7. Backpressure Monitor. 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. [40 CFR 60.4209(b).]

E.8. Operation and Maintenance. The owner or operator must operate and maintain the stationary CI RICE according to the manufacturer's emissions-related 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).]

Testing and Compliance Requirements

E.9. Compliance Requirements Due to Loss of Certification. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:

- a. For engines rated at less than 100 HP (< 100 HP); keep a maintenance plan and records of maintenance conducted to demonstrate compliance and maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. Emissions testing is not required unless:
 - 1) The permittee does not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or
 - 2) The permittee changes the emission-related settings in a way that is not permitted by

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Subsection E. Emissions Unit 105

Emergency Fire Pump CI RICE Subject to NSPS 40 CFR 60 Subpart IIII

the manufacturer.

If testing is required, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action. No subsequent performance testing is required.

- b. For engines rated greater than or equal to 100 HP and less than or equal to 500 HP ($100 \text{ HP} \leq \text{Engine HP} \leq 500 \text{ HP}$), keep a maintenance plan and records of conducted maintenance and maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. Initial performance testing is required within 1 year of startup, or within 1 year after an engine or control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after emission-related settings are changed in a way that is not permitted by the manufacturer.
- c. For engines rated at greater than 500 HP ($>500 \text{ HP}$), keep a maintenance plan and records of conducted maintenance and maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. Initial performance testing is required within 1 year of startup, or within 1 year after an engine or control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. Periodic performance testing is required every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with applicable emission standards. [40 CFR 60.4211(g)(3).]

Test Methods and Procedures

E.10. Emissions of PM, SO₂, 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),
- 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.

[Rules 62-297.401 (9)(c), 62-297.310(4)(a)2., 62-297.3 10(7)(a)4.a, F.A.C.]

Recordkeeping Requirements

E.11. Monthly Recordkeeping Requirement. In order to demonstrate compliance with the limits on non-emergency hours of operation, the permittee shall document the hours and type of non-emergency operation for each engine in this EU, as applicable per 40 CFR 60.4214 (b), in a monthly log at the facility for at least five (5) years from the date the data are recorded. The log, at a minimum, shall contain the following:

- a. Date (month/year);
- b. Amount of each type of fuel used for EU 105;
- c. Consecutive 12-month total of the quantity of each fuel type combusted in EU 105. Should fuels other than diesel fuel be used in these engines, the consecutive 12-month usage rates shall be calculated on a pro-rated basis that is based on the relative fuel heat content value of the alternate fuel(s) expressed as gallons of diesel fuel.

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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection E. Emissions Unit 105

Emergency Fire Pump CI RICE Subject to NSPS 40 CFR 60 Subpart IIII

available until such a time as a consecutive 12-month total can be maintained each month. [Rule 62-4.070(3), F.A.C.]

E.12. Fuel Certification Requirements. The fuel certifications shall include the following information for distillate oil (i.e., No. 2 fuel oil, diesel oil, biodiesel):

- a. The name of the oil supplier and either (b) and (c), or (d) following.
- b. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c of 40 CFR 60, Subpart Dc; and
- c. The sulfur content or maximum sulfur content of the oil; or
- d. 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 EU 103. [Rules 62-210.200, Potential to Emit and 62-4.070(3), F.A.C.]

{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.}

E.13. 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).]

E.14. Permit Application. This emissions unit applies to existing Stationary CI RICE units subject to 40 CFR 60 Subpart IIII.

a. Air Construction Permit Requirement:

- i. For stationary CI RICE units that are being added, modified, or reconstructed, the categorical exemption from requiring an Air Construction Permit for Stationary Reciprocating Internal Combustion Engines (62-210.300(3)(a)35, F.A.C.) shall apply as long as the applicable exemption fuel usage thresholds (e.g., 64,000 gallons of diesel annually or equivalent amount for other fuels) are not exceeded.
- ii. If the fuel threshold will be exceeded, the Permittee will be required to obtain a Construction Permit for each stationary CI RICE unit being added, modified, or reconstructed.

- b. Modification of Title V Permit Requirement: If the stationary CI RICE is subject to an applicable requirement (in this case 40 CFR 60 Subpart IIII), the RICE will be required to be incorporated into the Title V Operation Permit within 180-days of commencing operation, through the submittal of a Title V Permit Revision application in accordance with Rule 62-213.420(1)(a)3, F.A.C.

The facility will notify the Department of any units utilizing the fuel threshold exemption and will provide an updated list of engines with the latest Semi-Annual Monitoring Report (Condition Error! Reference source not found.). The Permittee will evaluate the threshold status of its fuel usages for engines claiming the categorical exemption relevant to the exemption threshold status annually based upon data compiled and submitted with the AOR.

NSPS 40 CFR 60, Subpart A & IIII Requirements

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Subsection E. Emissions Unit 105

Emergency Fire Pump CI RICE Subject to NSPS 40 CFR 60 Subpart III

E.15. NSPS 40 CFR 60 Requirements - Subpart A. These engines shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions including:

- 40 CFR 60.7, Notification and Recordkeeping
- 40 CFR 60.8, Performance Tests
- 40 CFR 60.11, Compliance with Standards and Maintenance Requirements
- 40 CFR 60.12, Circumvention
- 40 CFR 60.13, Monitoring Requirements
- 40 CFR 60.19, General Notification and Reporting requirements

adopted by reference in Rule 62-204.800(8)(c), F.A.C. and attached to this permit as **Appendix 40 CFR 60 Subpart A**, except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. [Rule 62-204.800(8)(d), F.A.C.]

E.16. 40 CFR 60 Requirements - Subpart III. These engines shall comply with all applicable requirements of 40 CFR 60, Subpart III, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, which have been adopted by reference in Rule 62- 204.800(8)(b), F.A.C., and attached to this permit as **Appendix 40 CFR 60 Subpart III**. [Rule 62-204.800(8)(b), F.A.C.]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection F. Emissions Unit 106

Chromate Conversion Operation subject to NESHAP Subpart WWWWWW (“6W”)

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

EU No.	Brief Description
106	Chromate Conversion Operation subject to NESHAP Subpart WWWWWW (“6W”)

Detailed Description:

This EU includes a chromate conversion operation subject to NESHAP 40 CFR 63 Subpart WWWWWW (“6W”). This EU is comprised of a chromate conversion coating process that is conducted at the Launch Equipment Shop (LES) Paint Shop (Building K6-1397). Based on the percentage of chromium in the solution, this unit, which is located at an area source of HAPs, is subject to requirements of the NESHAP contained at 40 CFR 63, Subpart 6W - *National Emission Standards for Plating and Polishing Operations*, adopted by reference in Rule 62.204.800, F.A.C. The equipment in this EU is considered to be a regulated emissions unit. The only applicable requirements that the operation must comply with are best management work practice requirements of NESHAP 40 CFR 63 Subpart 6W (Condition **F.2.**)

Emission estimates from this operation were considered to be negligible, based on a review of site specific operational records. For inventory tracking purposes, the units in this EU are listed on **Attachment 6-A** of this permit. The most recent list shall be included in the latest Semi-Annual Monitoring Report.

Air Pollution Control Systems and Measures:

Best management work practice requirements of NESHAP 40 CFR 63 Subpart 6W are used.

Stack Parameters:

The chromate conversion coating process tank results in fugitive emissions. There are no stacks for this EU.

{Permitting Note(s): This emission unit is regulated under: 40 CFR 63, Subpart WWWWWW, NESHAP for Plating and Polishing Operations. This is an affected source which conducts a plating or polishing process that uses process materials that contain cadmium, chromium, lead, or nickel (as the metal) in amounts less than 0.1 percent by weight.}

Essential Potential to Emit (PTE) Parameters

F.1. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200, PTE, F.A.C.]

Operation and Monitoring Requirements

F.2. Management Practices and Equipment Standards. The owner or operator shall use the following management practices as practicable:

- a. Minimizing bath agitation when removing any parts processed in the tank, as practicable, except when necessary to meet part quality requirements.
- b. Using a tank cover and employ the tank cover, whenever practicable (e.g., when the tank is not processing parts).
- c. Using mechanical agitation in the tank and not air agitation.
- d. Keeping the tank at or near ambient temperature
- e. Performing regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment with affected sources, as practicable.
- f. Minimizing bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable.
- g. Maintaining quality control of chemicals, and other bath ingredient concentrations in the tanks, as practicable.
- h. Performing general good housekeeping, such as regular sweeping or vacuuming, if needed,

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection F. Emissions Unit 106

Chromate Conversion Operation subject to NESHAP Subpart WWWWWW (“6W”)

and periodic wash-downs, as practicable.

- i. Minimizing spills and overflow of tanks, as practicable.
- j. Performing regular inspections to identify leaks and other opportunities for pollution prevention [40 CFR 63.11507(g).]

Recordkeeping and Reporting Requirements

- F.3. Reporting.** The permittee shall prepare an annual Certification of Compliance Report and Report of Deviations by January 31st. The report must state that you have implemented the applicable management practices, as practicable. Any Certification of Compliance Report and Report of Deviations that does not have a deviation report is not required to be submitted; it must be kept in a readily-accessible location for inspector review. If a deviation has occurred during the year, a deviation report must be included with the next annual Certification of Compliance Report and Report of Deviations. Any Certification of Compliance Report and Report of Deviations that includes a deviation report must be submitted to the Compliance Authority (postmarked or delivered) no later than January 31 of the year immediately following the reporting period. [40 CFR 63.11509.]
- F.4. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

NESHAP 40 CFR 63 Requirements

- F.5. NESHAP 40 CFR 63 Requirements - Subpart A.** This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which this emissions unit is subject to are found at 40 CFR 63.1 and are included in **Appendix 40 CFR 63 Subpart A**. [Rule 62-204.800(11)(d)1., F.A.C.]
- F.6. NESHAP 40 CFR 63 Requirements - Subpart WWWWWW.** This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart WWWWWW, NESHAP for Plating and Polishing Operations. The applicable 40 CFR 63, Subpart WWWWWW, NESHAP for Plating and Polishing Operations to which this emissions unit is subject to are found at 40 CFR 63.11504 and are included in **Appendix 40 CFR 63, Subpart WWWWWW**. [40 CFR 63.11504.]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

**Subsection G. Emissions Unit 107
Portable Material Crushing Operations**

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

EU No.	Brief Description
107	Portable Material Crushing Operations

Detailed Description:

This EU is comprised of portable crushing operation subject to NSPS 40 CFR 60, Subpart OOO and provides for the operation of a portable material crushing operation. A portable crushing unit will be brought on-site for specific projects. The crusher will be owned and operated by a contractor and will have a General Air Operation Permit. This portable material crushing operation is used to recycle a variety of construction materials (e.g., concrete and porcelain plumbing fixtures, such as, sinks and toilets). Units that comprise EU 107 are listed in **Attachment 7-A** of this permit.

Air Pollution Control Systems and Measures:

Emissions are controlled by water sprays. Other control measures may be used to minimize particulate matter emissions.

Stack Parameters:

Configuration of the portable crushing plant and exhaust characteristics will vary by portable crushing plant.

{Permitting Note: This emission unit is regulated under: NSPS 40 CFR Part 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants.}

Essential Potential to Emit (PTE) Parameters

- G.1. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rules 62-4.070(1)&(3) and 62-210.200, PTE, F.A.C.]
- G.2. Emissions Unit 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

Unless otherwise specified, the averaging time for Specific Conditions **G.3. - G.4.** are based on the specified averaging time of the applicable test method.

- G.3. Visible Emission (VE) Limitation.** Visible emissions from any crusher, grinding mill, screenings/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.]
- G.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, Rule 62-204.800(8)(b), F.A.C.]

- G.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(s), the entrance and exit of the crusher, the classifier screens, and the conveyor drop points. [Rule 62-210.310(5)(e) and 62-296.320(4)(c), F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

**Subsection G. Emissions Unit 107
Portable Material Crushing Operations**

Test Methods and Procedures

G.6. VE Testing. Upon a crusher being located onsite, the permittee shall select at least one of the Subpart OOO emission points (with or without a capture system) and shall conduct a VE test that demonstrates compliance with the 40 CFR 60 Subpart OOO VE limit. If a crusher is onsite for longer than one year, each year a different Subpart OOO emission point shall be selected. [Rules 62-4.070(1)&(3), 62-297.310(5)(b), 62-297.320 and 62-297.310(8)(a)3., F.A.C.]

G.7. Test Methods. Required tests shall be performed in accordance with the following reference method.

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above method is described in Appendix A of 40 CFR 60 and is adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800, F.A.C.; and Appendix A of 40 CFR 60.]

G.8. 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

G.9. General Recordkeeping Requirements - The permittee shall keep records for each crushing system operated on site as follows:

- a. Owner Name;
- b. General Air Operation Permit number for the portable crusher (e.g., 7771234-XXX-AX) and permit effective date;
- c. Dates when the crusher arrives and departs from the facility;
- 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(1)&(3) and 62-210.310(2)(a)3, F.A.C.]

G.10. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

NSPS 40 CFR 60 Requirements

G.11. NSPS 40 CFR 60 Requirements - Subpart OOO. Except as otherwise provided in this permit, this emissions unit/points shall comply with all applicable provisions of 40 CFR 60, Subpart Y, Standards of Performance for Nonmetallic Mineral Processing Plants, adopted and incorporated by reference in Rule 62-204.800(8)(b)69., F.A.C. This emissions unit/points shall comply with **Appendix 40 CFR 60 Subpart OOO** included with this permit. [Rule 62-204.800(8)(b)69., F.A.C.]

G.12. NSPS 40 CFR 60 Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions including:
40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

**Subsection G. Emissions Unit 107
Portable Material Crushing Operations**

40 CFR 60.11, Compliance with Standards and Maintenance Requirements

40 CFR 60.12, Circumvention

40 CFR 60.13, Monitoring Requirements

40 CFR 60.19, General Notification and Reporting requirements

adopted by reference in Rule 62-204.800(8)(d), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. This emissions unit shall comply with **Appendix 40 CFR 60 Subpart A** attached to this permit. [Rule 62-204.800(8)(d), F.A.C.]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 108

Emergency Stationary Spark Ignition RICE subject to NSPS 40 CFR 60 Subpart JJJJ

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

EU No.	Brief Description
108	Emergency Stationary Spark Ignition RICE subject to NSPS 40 CFR 60 Subpart JJJJ

Emergency Stationary Spark Ignition RICE subject to NSPS 40 CFR 60 Subpart JJJJ. This emissions unit is comprised of one non-emergency stationary Spark Ignition (SI) RICE manufactured after April 1, 2006, or modified or reconstructed after July 11, 2005, located throughout the site. This non-emergency stationary CI RICE is subject to the requirements of the NSPS contained at 40 CFR 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, adopted in Rule 62.204.800(8)(b), F.A.C. The engine is considered to be regulated; they are not insignificant, exempt, or non-regulated.

Units that comprise EU108 are listed in **Attachment 8-A** of this permit.

Stack Parameters:

Varies.

{Permitting Note: This emergency spark ignition (SI) internal combustion engine (SI ICE) is regulated under 40 CFR Part 60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines adopted by reference in Rule 62.204.800(8)(b), F.A.C. This permit section addresses “new” stationary emergency SIRICE with a displacement of less than 10 liters per cylinder, located at an area source of HAP, that have been modified, reconstructed, or commenced construction on or after June 12, 2006, and that have a post 2007 model year. In accordance with 40 CFR 63.6590(c)(1) (Subpart ZZZZ), this “new” emergency stationary SIRICE located at an area source of HAP that commenced construction after June 12, 2006, meets the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart JJJJ.}

Essential Potential to Emit (PTE) Parameters

H.1. Authorized Fuel. This engine shall be fueled by natural gas only. The engine may operate using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use (see also Specific Condition **H.8**). [40 CFR 60.4243(e).]

H.2. Restricted Hours of Operation. The following limitations apply individually to each engine: You must operate this emergency engine according to the requirements in paragraphs **a.** through **c.** In order for these engines to be considered emergency stationary ICE under Subpart JJJJ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in the paragraphs below, is prohibited. If you do not operate this engine according to the requirements in paragraphs **a.** through **c.** below, these engines will not be considered emergency engines and must meet all requirements for non-emergency engines pursuant to 40 CFR 60, Subpart JJJJ. [40 CFR 60.4243(d).]

a. *Emergency Situations.* There is no time limit on the use of the engine in emergency situations. [40 CFR 60.4243(d)(1).]

b. *Non-Emergency Situations.* You may operate the engine for the purposes specified in paragraph b.(1) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph c. counts as part of the 100 hours per calendar year allowed. [40 CFR 60.4243(d)(2).]

(1) *Maintenance and Testing.* Each emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 108

Emergency Stationary Spark Ignition RICE subject to NSPS 40 CFR 60 Subpart JJJJ

maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. [40 CFR 60.4243(d)(2)(i).]

- c. *Other Non-Emergency Situations.* Each emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph b., above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4243(d)(3).]

Emissions Standards

H.3. Emissions Limits. Exhaust emissions from this engine shall not exceed the levels for each pollutant shown in the table below:

ID Code	Engine Manufacturer	Engine HP	Engine kW	Model Year	Emissions Limit Rule Reference	Emissions Limits, g/HP-hr	
						NOx+HC	CO
TBD	Generac	50.99	32	2018	40 CFR 60.4233(d) and Table 1	10.0	387
M6-0409-1							

Monitoring Requirements

H.4. Hour Meter. You must operate and maintain a non-resettable hour meter on this engine. [40 CFR 60.4237(b) & (c).]

H.5. Testing and Compliance Requirements

H.6. Operation and Maintenance. The owner or operator must operate and maintain this engine to achieve the emission standards specified in Specific Condition **H.3** over the entire life of the engine. [40 CFR 60.4234.]

H.7. Compliance Requirements. You must demonstrate compliance according to one of the following options:

- a. *Certified Engine Operated According to Manufacturer.* If you purchased an engine certified to meet the emissions limits in Specific Conditions **H.3**, you must demonstrate compliance according to one of the following methods:
 - (1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance. [40 CFR 60.4243(b)(1) & 40 CFR 60.4243(a)(1).]
 - (2) If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance as follows:
 - (1) **For units with a maximum engine power less than 100HP.** Keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required. [40 CFR 60.4243(a)(2)(i).]
 - (2) **For units with a maximum engine power 100 – 500HP.** Keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In

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addition, you must conduct an initial performance test to demonstrate compliance with the emission standards specified in Specific Conditions **Error! Reference source not found.** within 1 year of engine startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. [40 CFR 60.4243(a)(2)(ii).]

[Rule 62-213.440, F.A.C.; and, 40 CFR 60.4243(b)(1) & 40 CFR 60.4243(a)(2).]

- b. *Non-Certified Engine.* If you purchased a non-certified engine, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the emission standards specified in Specific Conditions **Error! Reference source not found.** according to the requirements specified in Specific Condition **H.10**[40 CFR 60.4243(b)(2) & (b)(2)(i)]

H.8. Use of Propane. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, you are required to conduct a performance test to demonstrate compliance with the emission standards specified in Specific Conditions **H.3** according to the requirements specified in Specific Condition **H.10**[40 CFR 60.4243(b)(2), (b)(2)(i) & (e).]

H.9. Testing Requirement for Non-certified Engines. If you purchased a non-certified engine that is less than or equal to 500HP or you do not operate and maintain your certified less than or equal to 500HP stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing according to the requirements specified in Specific Condition **H.10**, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a). [40 CFR 60.4243(f).] [Link to 40 CFR 94.11](#)

H.10. Testing Requirements. In the event performance tests are required pursuant to Specific Conditions **H.7-H.9**, the following requirements shall be met:

- Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in 40 CFR 60.8 ([Link to 40 CFR 60.8](#)) and under the specific conditions that are specified by Table 2 of 40 CFR 60, Subpart JJJJ ([Link to Table 2](#)).
- You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.
- You must conduct three separate test runs for each performance test required in this section, as specified in 40 CFR 60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.
- To determine compliance with the NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 1 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \quad (\text{Eq. 1})$$

Where:

ER = Emission rate of NO_x in g/HP-hr.

C_d = Measured NO_x concentration in parts per million by volume (ppmv).

1.912×10⁻³ = Conversion constant for ppm NO_x to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

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- e. To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \quad (\text{Eq. 2})$$

Where:

ER = Emission rate of CO in g/HP-hr.

C_d = Measured CO concentration in ppmv.

1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

- f. When calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \quad (\text{Eq. 3})$$

Where:

ER = Emission rate of VOC in g/HP-hr.

C_d = VOC concentration measured as propane in ppmv.

1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

- g. If you choose to measure VOC emissions using either Method 18 of 40 CFR 60, Appendix A ([Link to Method 18](#)), or Method 320 of 40 CFR 63, Appendix A ([Link to Method 320](#)), then you have the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_{M_i}}{C_{A_i}} \quad (\text{Eq. 4})$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.

C_{M_i} = Measured concentration of compound i in ppmv as carbon.

C_{A_i} = True concentration of compound i in ppmv as carbon.

$$C_{i_{corr}} = RF_i \times C_{i_{meas}} \quad (\text{Eq. 5})$$

Where:

$C_{i_{corr}}$ = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

$C_{i_{meas}}$ = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{P_{eq}} = 0.6098 \times C_{i_{corr}} \quad (\text{Eq. 6})$$

Where:

$C_{P_{eq}}$ = Concentration of compound i in mg of propane equivalent per DSCM.

[40 CFR 60.4244.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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H.11. 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.]

Notification, Records and Reports

H.12. Compliance Records. You must keep records of the following information:

- a. All notifications submitted to comply with this permit and all documentation supporting any notification.
- b. Maintenance conducted on the engine.
- c. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable. [Link to eCFR](#)
- d. If the less than or equal to 500HP stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to Specific Condition **H.7.a(2)**, documentation that the engine meets the emission standards.
- e. Records of Propane used during emergency operations, if any. [40 CFR 60.4243(e).]
[40 CFR 60.4245(a).]

H.13. Hours of Operation Records. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter and 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. [40 CFR 60.4245(b).]

H.14. Test Reports. You must submit a copy of each performance test as conducted in Specific Condition **H.10** within 60 days after the test has been completed. [40 CFR 60.4245(d).]

H.15. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

H.16. Permit Application. This emissions unit consists of Stationary SI RICE units subject to 40 CFR 60 Subpart JJJJ.

a. Air Construction Permit Requirement:

- i. For stationary SI RICE units that are being added, modified, or reconstructed, the categorical exemption from requiring an Air Construction Permit for Stationary Reciprocating Internal Combustion Engines (62-210.300(3)(a)35, F.A.C.) shall apply as long as the applicable exemption fuel usage thresholds (e.g., 64,000 gallons of diesel annually, 8.8 million standard cubic feet of natural gas or equivalent amount for other fuels, given as a fuel percentage) are not exceeded.
- ii. If the fuel threshold will be exceeded, the Permittee will be required to obtain a Construction Permit for each stationary SI RICE unit being added, modified, or reconstructed.

- b. Modification of Title V Permit Requirement: If the stationary SI RICE is subject to an applicable requirement (in this case 40 CFR 60 Subpart JJJJ), the RICE will be required to be incorporated into the Title V Operation Permit within 180-days of commencing operation, through the submittal of a Title V Permit Revision application in accordance with Rule 62-213.420(1)(a)3, F.A.C.

The facility will notify the Department of any units utilizing the fuel threshold exemption and will provide an updated list of engines with the latest Semi-Annual Monitoring Report (Condition Error! Reference source not found.). The Permittee will evaluate the threshold status of its fuel usages for engines claiming the categorical exemption relevant to the exemption threshold status annually based upon data compiled and submitted with the AOR

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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NESHAP 40 CFR 63, Subpart A & ZZZZ Requirements

H.17. 40 CFR 63 Requirements - Subpart A. These emissions units shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C. and attached to this permit as **Appendix 40 CFR 63 Subpart A**, except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which these emissions are subject to are found at 40 CFR 63.6665. [Rule 62-204.800(11)(d)1., F.A.C.]

H.18. 40 CFR 63 Requirements - Subpart ZZZZ. These emissions units shall comply with all applicable requirements of 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), which have been adopted by reference in Rule 62-204.800(11)(b), F.A.C., and attached to this permit as **Appendix 40 CFR 63 Subpart ZZZZ** [Rule 62-204.800(11)(b), F.A.C.]

NSPS 40 CFR 60, Subpart A & JJJJ Requirements

H.19. NSPS 40 CFR 60 Requirements - Subpart A. These engines shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions including:
40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting requirements
adopted by reference in Rule 62-204.800(8)(c), F.A.C. and attached to this permit as **Appendix 40 CFR 60 Subpart A**, except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. [Rule 62-204.800(8)(d), F.A.C.]

H.20. 40 CFR 60 Requirements - Subpart JJJJ. These engines shall comply with all applicable requirements of 40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, which have been adopted by reference in Rule 62-204.800(8)(b), F.A.C., and attached to this permit as **Appendix 40 CFR 60 Subpart JJJJ**. [Rule 62-204.800(8)(b), F.A.C.]

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**Subsection I. Emissions Unit 109
Gasoline Dispensing Operations**

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

EU No.	Brief Description
109	Gasoline Dispensing Operations

Detailed Description:

Gasoline Dispensing Operations subject to NESHAP 40 CFR 63, Subpart CCCCCC (“6-C”). This emissions unit is comprised of four on-site gasoline vehicle fueling operations and storage tanks with less than 10,000-gallons per month of throughput. These operations are subject to regulation pursuant to 40 CFR 63, Subpart CCCCCC - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities. The emission sources to which this regulation applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at this facility, which are under control of the facility. Pressure/vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at a gasoline dispensing facility (GDF) are covered emission sources. Distillate fuel oil transfer and storage tanks are not subject to this regulation because of having a vapor pressure lower than 27.6 kpa.

Units that comprise EU 109 are listed in **Attachment 9-A** of this permit.

The following definitions are applicable to units subject to regulation in this section of the permit:

Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines.

Gasoline cargo tank means a delivery tank truck or railcar which is loading or unloading gasoline, or which has loaded or unloaded gasoline on the immediately previous load.

Gasoline dispensing facility (GDF) means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.

Monthly throughput means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.

The four GDFs at the facility are listed below.

Gasoline dispensing facility (GDF) Description	Fuel Type	Storage Capacity
KARS Park Fueling	Gasoline	100 Gallons
Visitors Center	Gasoline	500 Gallons
<u>North</u> Fueling Station	Gasoline	4,000 Gallons
Security Boathouse	Gasoline	500 Gallons

Air Pollution Control Systems and Measures:

Submerged fill is utilized for all of the tanks. Tanks utilize submerged fill with pipes no more than 6 inches from the bottom of the tanks.

{Permitting Note: This emission unit is regulated under: 40 CFR 63, Subpart CCCCCC -National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities.}

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection I. Emissions Unit 109 Gasoline Dispensing Operations

Essential Potential to Emit (PTE) Parameters

- I.1. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rules 62-4.070(1)&(3) and 62-210.200, PTE, F.A.C.]

General Duties to Minimize Emissions

- I.2. Proper Operation.** The permittee must, at all times, 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 63.11115(a).]

Requirements for Facilities with Monthly Throughput of Less Than 10,000 Gallons of Gasoline

- I.3. Precautions to Prevent Extended Vapor Releases.** The permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
- Minimize gasoline spills;
 - Clean up spills as expeditiously as practicable;
 - Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
 - Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
 - Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph c. [Link to 40 CFR 59, Subpart F](#)
- [40 CFR 63.11116(a).]
- I.4. Throughput Exceedance.** If monthly throughput ever exceeds 10,000 gallons of gasoline, these units become subject to the requirements of 40 CFR 63.11117 and will remain subject to those requirements, even if the monthly throughput later falls below 10,000 gallons of gasoline. [40 CFR 63.11111(i)]
- I.5. Portable Gasoline Tanks.** The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to the requirements of Specific Condition **I.3.**, even if the requirements of Specific Condition **I.4.** are triggered. [40 CFR 63.1111(j).]

Recordkeeping and Reporting Requirements

- I.6. Availability of Records.** The permittee must have records available within 24 hours of a request by the Compliance Authority to document your gasoline throughput. [40 CFR 63.11116(b).]
- I.7. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

NESHAP 40 CFR 63 Requirements

- I.8. NESHAP 40 CFR 63 Requirements - Subpart A.** This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which this emissions unit is subject to are found at 40 CFR 63.1 and are included in **Appendix 40 CFR 63 Subpart A.** [Rule 62-204.800(11)(d)1., F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

**Subsection I. Emissions Unit 109
Gasoline Dispensing Operations**

I.9. NESHAP 40 CFR 63 Requirements - Subpart CCCCCC. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart CCCCCC, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities. The applicable 40 CFR 63, Subpart CCCCCC, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities to which this emissions unit is subject to are found at 40 CFR 63.11111 and are included in **Appendix 40 CFR 63, Subpart CCCCCC.** [40 CFR 63.11111.]

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