



**PERMITTING AND COMPLIANCE AUTHORITY**

Environmental Protection and Growth Management Department  
POLLUTION PREVENTION, REMEDIATION AND AIR QUALITY DIVISION – AIR QUALITY PROGRAM  
One North University Drive, Suite 203, Plantation, Florida 33324  
954-519-1260 \* Fax: 954-519-1495

**DRAFT PERMIT**

**Permittee:**

Todd Cannon, Vice-President  
Vecenergy  
101 Sansbury's Way  
Palm Beach, Florida 33411

**Air Permit No.** 0112688-004-AC

**Date of Issue:** xxxxxx

**Expiration Date:** xxxxxxxx

**Project:** Construction

**Plant Name:** Vecenergy Logistics - Port Everglades Terminal, 1200 SE 32<sup>nd</sup> Street, Dania Beach, Broward County, Florida. Latitude: 26° 05' 5" North and Longitude: 80° 07' 47" West.

**Project Description:** Facility wide construction permit for a bulk petroleum and denatured ethanol products storage and distribution terminal (SIC 5171) to revise existing permit No. 0112688-003-AC to increase the truck loading rack annual throughput for jet fuel from 42, 000,000 gal/yr to 306,600,000 gal/yr, and to allow for the construction of two additional loading lanes at the truck loading rack and for storage tank No. 213.

**Statement of Basis:** This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), Florida Administrative Code (F.A.C.) Rules 62-4 and 62-210 through 62-297 (permitting requirements) and Broward County Code, Chapter 27 (emission limitations) and in conformance with all existing regulations of the Florida Department of Environmental Protection (FDEP). The above-named Permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Broward County Pollution Prevention, Remediation and Air Quality Division (PPRAQD) and made a part hereof.

This permit is organized by the following sections.

- Section 1. Facility Description
- Section 2. Facility-wide Conditions
- Section 3. Emissions Unit Specific Conditions
- Section 4. Appendices

**Effective Date:**

**Renewal Application Due Date:**

**Expiration Date:**

Executed in Broward County, Florida

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Daniela Banu

Air Quality Administrator

Broward County Pollution Prevention, Remediation and Air Quality Division

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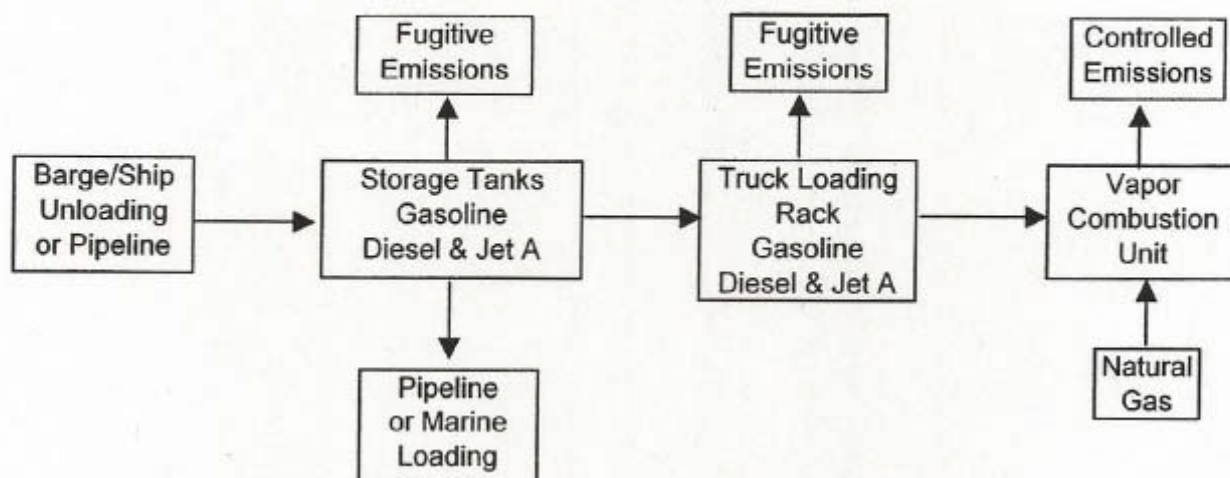
## SECTION 1. FACILITY DESCRIPTION

### New Facility

The facility consists of a bulk petroleum and denatured ethanol products storage and distribution terminal (SIC 5171) with a total storage capacity of 1,306,498 barrels (54,872,916 gallons). The terminal will receive gasoline, ethanol, jet aviation fuel, and distillate fuel products by vessel delivery or pipeline, and distributes them either by truck loading racks or by pipeline. The facility consists of the following emissions units.

<u>ID Number</u>	<u>Description of Emissions Unit</u>	<u>Permit Section</u>
003	Loading Rack with a vapor combustion unit (VCU)	(See Section 2 Subsection A)
001	Floating Roof Petroleum Storage Tanks	(See Section 2 Subsection B)
002	Fixed Roof Storage Tanks	(See Section 2 Subsection C)
005	Piping and Equipment Leaks	(See Section 2 Subsection D)
004	One Emergency Generator Diesel Engine and Two Emergency Fire Pump Diesel Engines	(See Section 2 Subsection E)
006	Marine Loading Operations (Uncontrolled)	(See Section 2 Subsection F)

**Vecenergy Port Everglades - Flow Diagram**



### Facility Regulatory Classification

*Title III:* The facility is a synthetic minor source of hazardous air pollutants (HAP).

*Title V:* The facility is a synthetic minor source of volatile organic compounds (VOC) in accordance with Chapter 62-213 (Title V), Florida Administrative Code (F.A.C.).

*PSD:* The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

## SECTION 2. FACILITY -WIDE CONDITIONS

1. Capacity. The potential to emit (PTE) air pollutants at the source are synthetically limited to 84 tons per year (TPY) VOC and 9 TPY HAPs.  
[Rules 62-4.160(2), 62-210.200(PTE), Permit Application]  
{Permitting Note. The Title V PTE threshold is 100 TPY VOC, and the Title III PTE thresholds are 10 tons of any individual HAP or 25 tons of total HAPs.}
2. 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.]
3. VOC or Organic Solvents Emissions. The owner or operator 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 PPRAQD.  
[Rule 62-296.320(1) (a), F.A.C.]
4. 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. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement.  
[Rule 62-296.320(4) (b), F.A.C.]
5. Circumvention. No person shall circumvent any air pollution device, or allow the emission of air pollutants without the applicable air pollution control device operating properly.  
[Rule 62-210.650, F.A.C.,]
6. (1) Concealment. No person shall build, erect, install, or use any article, machine, equipment or other contrivance, the use of which will conceal any emission which would otherwise constitute a violation of any provisions of Broward County Codes.  
(2) Maintenance. No person shall operate any air pollution control equipment or systems without proper and sufficient maintenance to assure compliance with Broward County Codes.  
[Broward County Code, Sec. 27-175(b)]
7. Annual Operating Report (AOR). The AOR shall be submitted to the PPRAQD by April 1 of the following year. If the report is submitted using FDEP’s electronic annual operating report software (EAOR), there is no requirement to submit a copy to PPRAQD.  
[Rule 62-210.370(3) (c), F.A.C.]  
{Permitting Note. Information on the EAOR submittal is available at <http://www.dep.state.fl.us/air/emission/eaor/default.htm>}
8. Operating Permit Application. By this construction permit, the owner or operator is allowed to construct, operate, and conduct tests to determine compliance with the provisions of the permit, and to apply for and receive an operating permit prior to the expiration date of this construction permit. To properly apply for an operation permit the applicant shall submit the appropriate fee and certification that construction was completed noting any deviations from the conditions in the construction permit and test results where appropriate.  
[Rules 62-4.210(3), and 62-4.220, F.A.C.]  
{Permitting Note. The Permittee may also elect to submit the application electronically using the Electronic Permit Submittal and Processing system (EPSAP) available at <http://www.dep.state.fl.us/air/software.htm> }

## SECTION 2. FACILITY -WIDE CONDITIONS

9. Applicable Federal Regulations - Subpart BBBBBB. The issuance of this permit does not authorize any infringement of applicable federal regulations not currently adopted by the State of Florida (i.e. regulations that are only federally enforceable). The source is subject to the applicable requirements of 40 CFR 63 Subpart BBBBBB for bulk gasoline terminals, and is required to demonstrate compliance no later than January 10, 2011.  
[Rule 62-4.160(3), F.A.C., 40 CFR 63.11083]  
{Permitting Note: Subpart BBBBBB establishes national emission limitations and management practices for HAP emitted from area source gasoline distribution bulk terminals. This subpart also establishes requirements to demonstrate compliance with the emission limitations and management practices.}
10. General Permit Conditions. The owner or operator shall comply with the general permit conditions listed in Appendix 1.  
[Rule 62-4.160, F.A.C.]

### SECTION 3. EMISSION UNITS SPECIFIC CONDITIONS

**Subsection A.** This section addresses the following emission unit:

EU ID Number	Description of Emissions Unit
003	Loading Rack with VCU

The Six lanes truck loading rack is capable of a maximum truck fill rate of 7,800 gpm. Products loaded are gasoline/ diesel/ and jet aviation fuel.

{Permitting Note: This emission unit is regulated under NSPS - 40 CFR 60, Subpart XX, Standards of Performance for Bulk Gasoline Terminals adopted and incorporated by reference in Rule 62-204.800(7)(b) 53 F.A.C.; and RACT Rule 62-296.510 F.A.C. }

#### **Emission Limitations and Standards**

**A.1. Products Throughput.** The throughput (calculated on a 12-month rolling average basis) shall not exceed the following: 613.2 million gallons/year of gasoline and gasoline/ethanol blend; 168 million gallons/year of diesel; and 42 million gallons/year of jet aviation fuel.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE), Construction permit Application]

{Permitting Note. This self-imposed throughput and emission limit (see Condition A.2) serve to maintain the facility status as a synthetic minor source of VOC and HAPS.}

**A.2. Vapor Collection System Emissions Limit.** The emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks shall not exceed 10 milligrams of total organic compounds per liter of gasoline loaded.

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

Permitting Note. The self-imposed throughput (see Condition A.1) and the emission limit serve to maintain the facility status as a synthetic minor source of VOC and HAPS.}

**A.3. Loading Gasoline.** No person shall load gasoline into any tank, trucks, or trailers from any bulk gasoline terminal unless:

(a) Displaced vapors are vented only to the vapor control system; and

(b) A means is provided to prevent liquid waste from the loading device to exceed the quantity specified for the self-sealing coupler or adapter according to API regulation RP 1004 (or equivalent) upon the loading device being disconnected or when it is not in use (the above referenced are available from the American Petroleum Institute, 2101 "L" Street N.W., Washington, D.C. 20037); and,

(c) All loading and vapor lines equipped with fittings are vapor tight; and

(d) The bulk gasoline terminal is equipped with a properly installed and operated vapor control system complying with F.A.C. Rule 62-296.510 and which recovers vapors from the equipment being controlled or which directs all vapors to a combustion or incineration system.

[Rule 62-296.510(3), F.A.C.,]

**A.4. Loading Non-Gasoline Products.** Displaced vapors generated during the loading of products shall be vented to a vapor control system and the standards required in 40 C.F.R. 60, Subpart XX, shall apply to the loading rack, unless the owners or operators can demonstrate as a practical matter that the tank trucks being loaded do not contain gasoline vapors.

[Broward County Code, Sec. 27-177(f)]

{Permitting Note. An example of a practical demonstration is to use an electronic lockout monitoring system to prevent uncontrolled loading of non-gasoline products into tanker trucks whenever residual gasoline vapors from a previous loading are detected in the tanker trucks.}

### SECTION 3. EMISSION UNITS SPECIFIC CONDITIONS

#### **A.5. Gasoline Tank Truck - NSPS Requirements.**

- (a) *Vapor collection system design.* The facility shall be equipped with a vapor collection system designed to collect the total organic compounds vapors displaced from tank trucks during product loading.
- (b), (c) *Vapor collection system emissions limit.* (See Condition A.2.)
- (d) *Vapor collection system design.* The vapor collection system shall be designed to prevent any total organic compounds vapors collected at one loading rack from passing to another loading rack.
- (e) *Loading requirements.* Loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures:
  - (1) *Vapor tightness documentation.* The owner or operator shall obtain the vapor tightness documentation for each gasoline tank truck which is to be loaded at the affected facility. The vapor tightness documentation file for each gasoline tank truck shall be updated at least once per year to reflect current test results as determined by Method 27. This documentation shall include, as a minimum, the following information:
    - 1. Test title: Gasoline Delivery Tank Pressure Test--EPA Reference Method 27.
    - 2. Tank owner and address.
    - 3. Tank identification number.
    - 4. Testing location.
    - 5. Date of test.
    - 6. Tester name and signature.
    - 7. Witnessing inspector, if any: Name, signature, and affiliation.
    - 8. Test results: Actual pressure change in 5 minutes, mm of water (average for 2 runs).
  - (2) *Tank identification number - records.* The owner or operator shall require the tank identification number to be recorded as each gasoline tank truck is loaded at the affected facility.
  - (3) *Tank identification number – cross checking.*
    - (i) The owner or operator shall cross-check each tank identification number obtained in paragraph (e)(2) of this section with the file of tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded, unless either of the following conditions is maintained:
      - (A) If less than an average of one gasoline tank truck per month over the last 26 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed each quarter; or
      - (B) If less than an average of one gasoline tank truck per month over the last 52 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semiannually.
    - (ii) If either the quarterly or semiannual cross-check provided in paragraphs (e)(3)(i) (A) through (B) of this section reveals that these conditions were not maintained, the source must return to biweekly monitoring until such time as these conditions are again met.
  - (4) *Non-vapor-tight gasoline tank truck notification.* The terminal owner or operator shall notify the owner or operator of each non-vapor-tight gasoline tank truck loaded at the affected facility within 1 week of the documentation cross-check in paragraph (e)(3) of this section.
  - (5) *Non-vapor-tight gasoline tank truck reloading.* The terminal owner or operator shall take steps assuring that the non-vapor-tight gasoline tank truck will not be reloaded at the affected facility until vapor tightness documentation for that tank is obtained.
  - (6) *Alternate procedures.* Alternate procedures (e.g., a computerized card lock-out system) to those described in paragraphs (e)(1) through (5) of this section for limiting gasoline tank truck loadings may be used upon application to, and approval by, the administrator (EPA).
- (f) *Vapor collection equipment compatibility.* The owner or operator shall act to assure that loadings of gasoline tank trucks at the affected facility are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.
- (g) *Vapor collection systems connections.* The owner or operator shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the affected facility. Examples of actions to accomplish this include training drivers in the hookup

### SECTION 3. EMISSION UNITS SPECIFIC CONDITIONS

procedures and posting visible reminder signs at the affected loading racks.

- (h) *Gauge pressure during product loading.* The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading. This level is not to be exceeded when measured by the procedures specified in 40 CFR 60.503(d) (see Condition A.8 (d)).
- (i) *Pressure-vacuum vent.* No pressure-vacuum vent in the bulk gasoline terminal's vapor collection system shall begin to open at a system pressure less than 4,500 pascals (450 mm of water).
- (j) *Vapor leaks.* Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.

[40 CFR 60.502]

#### **A.6. VCU – Operating Requirements**

- (a) The VCU shall be operated at all times when emissions may be vented to the unit.
- (b) The VCU system shall be equipped to automatically prevent gasoline and gasoline/ethanol blend loading operations from beginning at any time that the pilot flame is absent.
- (c) The presence of the VCU pilot flame shall be monitored using a heat-sensing device, such as an ultraviolet beam sensor or a thermocouple, installed in proximity to the pilot light to indicate the presence of a flame.

[Rule 62-4.070(3), F.A.C.; Manufacturer Design Specifications]

### **Test Methods and Procedures**

#### **A.7. Testing Frequency**

- (1) *Formal Compliance Testing on the Loading Rack.* Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and during each federal fiscal year, the owner or operator shall conduct formal compliance tests on the vapor processing system and liquid loading equipment using the applicable test methods and procedures (see Conditions A.8 and A.9).
- (2) *Gasoline Cargo Trucks.* Owners of gasoline cargo trucks loading gasoline at the terminal shall update the cargo truck vapor tightness certification at least once per year to reflect current test results as determined by Method 27 (see Condition A.5 (e) (1))

[Rule 62-4.070(3); F.A.C.; 40 CFR 60.8(a)]

[Permitting Note. Annual testing is required to provide reasonable assurance that the source can maintain its synthetic minor classification.]

- A.8. General Compliance Testing Requirements.** Unless otherwise specified in the permit, the owner or operator shall comply with the general compliance test requirements of Rule 62-297.310, F.A.C. (see Appendix 2).  
[Rules 62-297.310]

- A.9. Performance Testing Requirements.** The owner or operator shall meet the following requirements during the formal compliance testing of the loading rack::
  - (a) *Reference methods and procedures.* In conducting the performance tests required in 40 CFR 60.8 (see Appendix 3), the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in 40 CFR.60.8(b). The three-run requirement of 40 CFR 60.8(f) does not apply to this subpart.
  - (b) *Monitor for leakage of vapor.* Immediately before the performance test on the vapor processing and liquid loading equipment, the owner or operator shall use Method 21 to monitor for leakage of vapor from all potential sources in the terminal's vapor collection system equipment while a gasoline tank

### SECTION 3. EMISSION UNITS SPECIFIC CONDITIONS

truck is being loaded. The owner or operator shall repair all leaks with readings of 10,000 ppm (as methane) or greater before conducting the performance test.

- (c) (1) *Test duration and gasoline loaded.* The performance test shall be 6 hours long during which at least 80,000 gallons (302,800 liters) of gasoline is loaded. If this is not possible, the test may be continued the same day until 80,000 gallons of gasoline is loaded or the test may be resumed the next day with another complete 6-hour period. In the latter case, the 80,000-gallons criterion need not be met. However, as much as possible, testing should be conducted during the 6-hour period in which the highest throughput normally occurs.
- (2) *Intermittent operation.* If the vapor processing system is intermittent in operation, the performance test shall begin at a reference vapor holder level and shall end at the same reference point. The test shall include at least two startups and shutdowns of the vapor processor. If this does not occur under automatically controlled operations, the system shall be manually controlled.
- (3) *Emission rate computation.* The emission rate (E) of total organic compounds shall be computed using the following equation:

$$E = K \sum_{i=1}^n (V_{esi} C_{ei}) / L 10^6$$

where:

E = emission rate of total organic compounds, mg/liter of gasoline loaded.

V<sub>esi</sub> = volume of air-vapor mixture exhausted at each interval "i", scm.

C<sub>ei</sub> = concentration of total organic compounds at each interval "i", ppm.

L = total volume of gasoline loaded, liters.

n = number of testing intervals.

i = emission testing interval of 5 minutes.

K = density of calibration gas, 1.83 x 10<sup>6</sup> for propane and 2.41 x 10<sup>6</sup> for butane, mg/scm.

- (4) *Test interval.* The performance test shall be conducted in intervals of 5 minutes. For each interval "i", readings from each measurement shall be recorded, and the volume exhausted (V<sub>esi</sub>) and the corresponding average total organic compounds concentration (C<sub>ei</sub>) shall be determined. The sampling system response time shall be considered in determining the average total organic compounds concentration corresponding to the volume exhausted.
- (5) *Volume (V<sub>esi</sub>) air-vapor mixture exhausted at each interval.* Method 2A shall be used to determine V<sub>esi</sub>:
- (6) *Total organic compounds concentration (C<sub>ei</sub>) at each interval.* Method 25A or 25B shall be used for determining C<sub>ei</sub>. The calibration gas shall be either propane or butane. The owner or operator may exclude the methane and ethane content in the exhaust vent by any method (e.g., Method 18) approved by the administrator.
- (7) *Volume (L) of gasoline dispensed during the performance test period.* To determine L at all loading racks whose vapor emissions are controlled by the processing system being tested, terminal records or readings from gasoline dispensing meters at each loading rack shall be used.
- (d) *Gauge pressure measurement.* The owner or operator shall use the following procedure to determine compliance with the standard in 40 CFR 60.502(h), which requires that the vapor collection and liquid loading equipment be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading.
- (1) A pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument), capable of measuring up to 500 mm of water gauge pressure with ± 2.5 mm of water precision, shall be calibrated and installed on the terminal's vapor collection system at a pressure tap located as close as possible to the connection with the gasoline tank truck.



### SECTION 3. EMISSION UNITS SPECIFIC CONDITIONS

- (2) During the performance test, the pressure shall be recorded every 5 minutes while a gasoline truck is being loaded; the highest instantaneous pressure that occurs during each loading shall also be recorded. Every loading position must be tested at least once during the performance test.

[40 CFR 60.503]

#### **Notifications, Recordkeeping and Reporting Requirements**

**A.10. General Notification, Recordkeeping and Reporting Requirements.** Emission unit 003 is subject to the requirements of 40 CFR 60.7 and 60.19 attached in the Appendices 4 and 5, respectively, and listed below [40 CFR 60.7 & 60.19]

**A.11. Compliance Test Notification.** The owner or operator shall notify PPRAQD, at least 30 days prior to the date on which the formal compliance tests are to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.  
[40 CFR 60.8 (d)]

**A.12. Compliance Test Report Submittal.** The compliance test report shall be submitted to the PPRAQD as soon as practicable, but no later than 45 days after the last test is completed.  
[Rule 62-297.310(8) (a) & (b), F.A.C.]

**A.13. Compliance Test Report Information.** The compliance test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow PPRAQD to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report shall provide the following information:

1. The type, location, and a general layout of the emissions unit tested including a sketch of the duct within 8 stack diameters upstream of the sampling point, including the distance to any upstream bends or other flow disturbances.
2. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters, and their operating parameters during each test run.
3. The normal type and amount of products loaded during each test run. Truck monitoring data sheets showing the amounts of accountable gasoline (or gasoline/ ethanol blend) loaded.
4. Test equipment specifications with instrument and calibration information. Data related to the required calibration of the test equipment.
5. Measurement and data acquisition/ analysis/ computation procedures to obtain all measured and calculated data to determine compliance with the emission limiting standard. Detailed calculations of the emission rate including computer printout of measurements and VOC analyzer strip charts.
6. Results of the Method 21 testing (prior to the formal loading rack compliance testing) for leaks around all fittings, flanges, valves, and any other exposed potential leak sources.
7. The names of individuals, who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
8. A certification that, to the knowledge of the owner or his authorized agent, all data submitted is true and correct. When a compliance test is conducted for the PPRAQD, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8) (c), and 62-4.070(3) F.A.C.]

**A.14. Records - NSPS.**

- (a) *Tank Truck Vapor Tightness Documentation.* The tank truck vapor tightness documentation required under 40 CFR 60.502(e) (1) shall be kept on file at the terminal in a permanent form available for inspection.

### SECTION 3. EMISSION UNITS SPECIFIC CONDITIONS

- (b) *Documentation File for each Gasoline Tank Truck.* The documentation file for each gasoline tank truck shall be updated at least once per year to reflect current test results as determined by Method 27. This documentation shall include, as a minimum, the following information:
- (1) Test title: Gasoline Delivery Tank Pressure Test - EPA Method 27.
  - (2) Tank owner and address.
  - (3) Tank identification number.
  - (4) Testing location.
  - (5) Date of test.
  - (6) Tester name and signature.
  - (7) Witnessing inspector, if any: Name, signature, and affiliation.
  - (8) Test results: Actual pressure change in 5 minutes, mm of water (average for 2 runs).
- (c) *Leak Inspection Report.* A record of each monthly leak inspection of the vapor collection system, vapor processing system and loading racks required under 40 CFR 60.502(j) shall be kept on file at the terminal for at least 2 years. Inspection records shall include, as a minimum, the following information:
- (1) Date of inspection.
  - (2) Findings (may indicate no leaks discovered; or location, nature, and severity of each leak).
  - (3) Leak determination method.
  - (4) Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days).
  - (5) Inspector name and signature.
- (d) *Non-vapor-tight gasoline tank truck documentations.* The terminal owner or operator shall keep documentation of all notifications required under 40 CFR 60.502(e) (4), non-vapor-tight gasoline tank truck loaded at the facility, on file at the terminal for at least 2 years.
- (e) *Alternative to keeping records at the terminal.* As an alternative to keeping records at the terminal of each gasoline cargo tank test result as required in paragraphs (a), (c), and (d) of this section, an owner or operator may comply with the requirements in either paragraph (e)(1) or (2) of this section.
- (1) An electronic copy of each record is instantly available at the terminal.
    - (i) The copy of each record in paragraph (e) (1) of this section is an exact duplicate image of the original paper record with certifying signatures.
    - (ii) The permitting authority is notified in writing that each terminal using this alternative is in compliance with paragraph (e) (1) of this section.
  - (2) For facilities that utilize a terminal automation system to prevent gasoline cargo tanks that do not have valid cargo tank vapor tightness documentation from loading (e.g., via a card lock-out system), a copy of the documentation is made available (e.g., via facsimile) for inspection by permitting authority representatives during the course of a site visit, or within a mutually agreeable time frame.
    - (i) The copy of each record in paragraph (e) (2) of this section is an exact duplicate image of the original paper record with certifying signatures.
    - (ii) The permitting authority is notified in writing that each terminal using this alternative is in compliance with paragraph (e) (2) of this section
- (f) *Replacements or additions of components.* The owner or operator of an affected facility shall keep records of all replacements or additions of components performed on an existing vapor processing system for at least 3 years.

[40 CFR 60.505]

**A.15. Test Results.** Test results records shall be maintained at the terminal for at least five years and be made available to PPRAQD upon request.  
[Rule 62-297.440(2) (b) 1.a, F.A.C.]

**A.16. Throughput.** The owner or operator shall keep monthly records of the total products throughputs for the previous 12 months (i.e. a rolling 12 months basis).  
[Rule 62-4.070(3) F.A.C.]

### SECTION 3. EMISSION UNITS SPECIFIC CONDITIONS

**Subsection B.** This section addresses the following emissions unit:

EU ID Number	Description of Emissions Unit
001	Nine (9) Floating Roof Petroleum Storage Tanks

The multiservice tanks may store gasoline, ethanol, jet aviation fuel or diesel.

{Permitting Note: This emission unit is regulated under Rule 62-296.508 F.A.C.: Reasonably Available Control Technology - Petroleum Liquid Storage and Rule 62-204.800(7)(b)16 F.A.C., which adopts by reference 40 CFR 60, Subpart Kb, Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.}

#### Essential Potential to Emit (PTE) Parameters

**B.1. (a) Capacity.** The owner or operator shall store in each tank listed in the following table, only products with maximum true vapor pressure equal or less than the maximum true vapor pressure of gasoline.

Tank No.	Capacity Gallons (cubic meters)	Primary Seal Type	Secondary Seal Type
205	124,964 (5,248,488)	Vapor-mounted	Rim-mounted
206	79,929 (3,357,018)	Vapor-mounted	Rim-mounted
207	79,929 (3,357,018)	Vapor-mounted	Rim-mounted
208	124,964 (5,248,488)	Vapor-mounted	Rim-mounted
209	124,964 (5,248,488)	Vapor-mounted	Rim-mounted
210	124,964 (5,248,488)	Vapor-mounted	Rim-mounted
211	124,964 (5,248,488)	Vapor-mounted	Rim-mounted
212	2,238 (93,996)	Vapor-mounted	Rim-mounted
213	2,238 (93,996)	Vapor-mounted	Rim-mounted

(b) Products Throughput. The products throughput for emission unit 001 (based on a 12-month rolling average) shall not exceed 1,147,276,082 gallons/yr of gasoline and ethanol. Also, the products throughput for emission units 001 and 002 shall not exceed 757,266,665 gallons of diesel, jet aviation fuel, and additives.

{Permitting Note: The self imposed throughput limits contributes to maintaining the facility status as a synthetic minor for VOC and HAPs.}

#### **B.2. Tanks – RACT Requirements.**

- (1) Applicability. The true vapor pressure of products stored in the floating roof storage tanks shall not exceed 11.0 psia (76 kilopascals) under actual storage conditions.
- (2) Control Technology. The IFR tanks shall comply with the following:
  - (a) The tanks have been retrofitted with an internal floating roof equipped with a closure seal, or seals, to close the space between the roof edge and tank wall, or have been retrofitted with an equally effective alternative control; and,
  - (b) The tanks are maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials; and,
  - (c) All openings, except stub drains are equipped with covers, lids, or seals such that:
    - (i) The cover, lid, or seal is in the closed position at all times except on demand for sampling, maintenance, repair, or necessary operational practices; and,
    - (ii) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on

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- the roof leg supports; and,
- (iii) Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

[Rule 62-296.508, F.A.C.]

### **B.3. NSPS Design Requirements**

- (i) The IFR shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The IFR shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
- (ii) The IFR shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the IFR:
- (A) *A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal).* A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
- (B) *Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the IFR.* The lower seal may be vapor-mounted, but both must be continuous.
- (C) *A mechanical shoe seal which consists of a metal sheet that is held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof.* A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- (iii) Each opening in a non contact IFR except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
- (iv) Each opening in the IFR except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
- (v) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
- (vi) Rim space vents shall be equipped with a gasket and are to be set to open only when the IFR is not floating or at the manufacturer's recommended setting.
- (vii) Each penetration of the IFR for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
- (viii) Each penetration of the IFR that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
- (ix) Each penetration of the IFR that allows for passage of a ladder shall have a gasketed sliding cover.
- [40 CFR 60.112b (a) (1)]

### **Test Methods and Procedures**

- B.4. Formal Tank Leak Testing.** During the 12-month period prior to renewal of the operation permit and whenever the tanks are emptied for non-operational reasons, the owner or operator shall check for VOC leaks in the IFR and roof seals using EPA 450/2-77-036 p. 6-2.  
[Rules 62-296.508(3) (a) and 62-4.070(3) F.A.C.]  
[Permitting note. EPA 450/2-77-036 p. 6-2 recommends routine inspections through the roof hatches be conducted at six months or shorter intervals, and a complete inspection of the seals and covers whenever the tanks are emptied for non-operational reasons (e.g. maintenance).]

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### **B.5. Test Procedures - NSPS.**

- (1) *Prior to initial fill.* Visually inspect the IFR, the primary seal, and the secondary seal, prior to filling the storage vessel with Volatile Organic Liquid (VOL). If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the IFR, or both, the owner or operator shall repair the items before filling the storage vessel.
- (2) (i) *Inspection at least once every 12 months after initial fill.* Visually inspect the IFR and the primary seal or the secondary seal through manholes and roof hatches on the fixed roof. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the administrator in the inspection report required in 40 CFR 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
- (3) *For vessels equipped with a double-seal system (i.e. two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the IFR. The lower seal may be vapor-mounted, but both must be continuous)*
  - (i) Visually inspect the vessel as specified in paragraph (a) (4) of this section at least every 5 years; or
  - (ii) Visually inspect the vessel as specified in paragraph (a) (2) of this section.
- (4) *Inspection at least every 10 years.* After the tank is emptied and degassed, visually inspect the IFR, the primary seal, the secondary seal, gaskets, slotted membranes and sleeves. If the IFR has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL.

In accordance with 40 CFR 63.1063(d)(1), the ten-year inspections can be conducted on a “top side” (i.e. in-service) basis, as long as there is visual access to all deck components that are required to be inspected.

[40 CFR 60.113b (a)]

{Permitting Note: In accordance with a response from USEPA, 40 CFR 60.113b (a) (4) does not require that tanks be taken out of service to do the inspection if the owner or operator can overcome the safety issues (confined space) while the tank is in service.}

### **Notification**

- B.6. Tank Testing Notification.** The owner or operator shall notify PPRAQD, at least 30 days prior to the date on which each formal compliance tests for the tanks are to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

[40 CFR 60.8 (d)]

- B.7. Notification, Recordkeeping and Reporting Requirements – NSPS.** Emission unit 001 is subject to the requirements of 40 CFR 60.7 and 60.19 attached in the Appendices 4 and 5, respectively, and listed below
- [40 CFR 60.7 & 60.19]

- B.8. Notification prior to the initial filling tanks after installing IFRs or refilling tanks after emptied and degassed – NSPS.**

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The owner or operator shall notify the PPRAQD in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b (a)(1) and (a)(4) (see Condition B.5. (1) and (4)) to afford the PPRAQD the opportunity to have an observer present. If the inspection required by 40 CFR 60.113b (a)(4) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the PPRAQD at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the PPRAQD at least 7 days prior to the refilling.  
[40 CFR 60.113b (a) (5)]

#### **Recordkeeping and Reporting Requirements**

**B.9. Inspection Reports - NSPS.** The owner or operator shall meet the following requirements.

- (1) Furnish PPRAQD with a report that describes the IFR and certifies that the IFR meets the specifications of 40 CFR 60.112b (a) (1) (see Condition No.B.3) and 40 CFR 60.113b (a) (1) (see Condition No. B.5). This report shall be an attachment to the notification required by 40 CFR 60.7(a) (3).
- (2) Keep a record of each inspection performed as required by 40 CFR 60.113b (a) (1), (a) (2), and (a) (4) (see Condition No. B.5)). Each record shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, IFR, and fittings).
- (3) If any of the conditions described in 40 CFR 60.113b (a) (2) (see Condition No. B.5), are detected during the annual visual inspection required by 40 CFR 60.113b (a) (2), a report shall be furnished to the PPRAQD within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.  
[40 CFR 60.115b (a)]

**B.10. Compliance Test Report Submittal.** The compliance test (see Condition B.4) report shall be submitted to the PPRAQD as soon as practicable, but no later than 45 days after the last test is completed.  
[Rule 62-297.310(8) (a) & (b), F.A.C.]

**B.11. Throughput.** The owner or operator shall keep monthly records of product throughputs for the previous 12 months (i.e. a rolling 12 month basis).  
[Rule 62-4.070(3) F.A.C.]

**B.12. Design and Operating Records - NSPS.**

- (a) The owner or operator shall keep copies of all records required by this section, except for the record required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section will be kept for the life of the source.
- (b) The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
- (c) The owner or operator shall maintain a record of the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
- (d) The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa shall notify the PPRAQD within 30 days when the maximum true vapor pressure of the liquid exceeds the maximum true vapor pressure value..
- (e) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below:
  - (1) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon

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the maximum local monthly average ambient temperature as reported by the National Weather Service.

- (2) For refined petroleum products the vapor pressure may be obtained by the following:
- (i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference - see 40 CFR 60.17), unless the PPRAQD specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
- (3) For other liquids, the vapor pressure:
- (i) May be obtained from standard reference texts, or
  - (ii) Determined by ASTM Method D2879-83 (incorporated by reference - see 40 CFR 60.17); or
  - (iii) Measured by an appropriate method approved by the PPRAQD; or
  - (iv) Calculated by an appropriate method approved by the PPRAQD.

[40 CFR 60.116b]

**Subsection C.** This section addresses the following emissions unit:

EU ID Number	Description of Emissions Unit
002	Four (4) Fixed Roof Storage Tanks.

This emission unit consists of fixed roof tanks that store diesel, jet aviation fuel, additives, and petroleum contact water (PCW).

#### **Essential Potential to Emit (PTE) Parameters**

**C.1.** (a) Capacity. The tanks listed below have the following capacities:

Tank No.	Design Capacity BBL (gallons)
201	129,336 (5,432,112)
202	129,336 (5,432,112)
203	129,336 (5,432,112)
204	129,336 (5,432,112)

- (b) Products Throughput. The products throughput for emission units 001 and 002 shall not exceed 757,266,665 gallons of diesel, jet aviation fuel, and additives based on a 12-month rolling average.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE)]

{Permitting Note: The self imposed throughput limits contributes to maintaining the facility status as a synthetic minor for VOC and HAPs.}

#### **Emission Limitations and Standards**

**C.2.** Liquid Vapor Pressure. The true vapor pressure of petroleum products stored in the tanks for emission unit 002 shall not exceed 0.50 psia.

[ 40 CFR 60.110b (b); Rule 62-4.070(3), F.A.C.]

{Permitting Note The tanks would not be exempted from the requirements of NSPS Subpart Kb if the true vapor pressure of the petroleum products stored exceeds the specified limiting value.}

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### **Recordkeeping and Reporting Requirements**

- C.4. Products Content and Throughput.** The owner or operator shall keep monthly records of TVP of product stored in the tanks and the total throughput of products for the previous 12 months .  
[Rule 62-4.070(3) F.A.C.]

**Subsection D.** This section addresses the following emissions unit.

EU ID Number	Description of Emissions Unit
005	Piping and Equipment (Fugitive Emission Sources)

Fugitive emission sources including valves, fittings, and other equipment associated with loading petroleum products and ethanol to tank trucks.

{Permitting Note. This emission unit is regulated under Rule 62-297.440 F.A.C., Supplementary Test Procedures at Gasoline Bulk Terminals, and 40 CFR 60, subpart XX).}

### **Emission Standards**

- D.1. Leak Standard.** During loading or unloading operations, there shall be no reading greater than or equal to 100 percent of the lower explosive level (LEL), measured as propane at 1 inch around the perimeter of a potential leak source as detected by a combustible gas detector using the procedure described in “Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems”, EPA 450/2-78-051, Appendix B.  
[Rule 62-297.440(2) (b) 2.a., F.A.C.]  
{Permitting Note. This leak standard is used whenever the operator is inspecting for leaks (see Condition D.2.) using a combustible gas detector. Fittings meeting the leak standard are considered to be vapor tight.}

### **Test Methods and Procedures**

- D.2. Leak Inspections – NSPS.** Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable. Each leak detection shall be recorded, and the source of the leak repaired within 15 calendar days after it is detected.  
[40 CFR 60.502 (j)]

### **Recordkeeping Requirements**

- D.3. Leak Repair Program.** Whenever leaks are detected by sight, sound, smell, or other methods, the owner or operator shall record the location of each leak, date of detection, and date of repair.  
[Rules 62-4.070(3)]

**Subsection E.** This section addresses the following emissions unit.

EU ID Number	Description of Emissions Unit
004	One Emergency Generator Diesel Engine and Two Fire Pump Diesel Engines

This emission unit consists of one 1000 kW (30.5 liters) emergency generator diesel engine and two fire pumps 373 HP (10.8 liters) diesel engines. All engines were manufactured and ordered in 2008.



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{Permitting Note: This emission unit is regulated under Rule 62-204.800 (8) (b) 76 which adopts NSPS Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE)}.

{Definitions:

*Emergency stationary internal combustion engine* means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

*Fire pump engine* means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.}

#### **Emission Standards and Operating Requirements**

##### **E.1. 373 hp Emergency Fire Pump Engines – Emission Standards**

(a) – (b) [NA]

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants

Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

Maximum engine power	Model year(s)	NMHC + NO <sub>x</sub> g/kW-hr (g/BHP-hr)	CO g/kW-hr (g/BHP-hr)	PM g/kW-hr (g/BHP-hr)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)

[40 CFR 60. 4205]

##### **E.2. 1000 kW Emergency Generator Engine – Emission Standards**

(a) – (c) [NA]

(d) Owners and operators of emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (d)(1) and (2) of this section.

(1) Reduce NO<sub>x</sub> emissions by 90 percent or more, or limit the emissions of NO<sub>x</sub> in the stationary CI internal combustion engine exhaust to 1.6 grams per KW-hour (1.2 grams per HP-hour).

(2) Reduce PM emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

[40 CFR 60.4205]

**E.3. General Provisions.** The owner or operator shall comply with the applicable requirements of Subpart A of 40 CFR 60 listed on Table 8 to Subpart IIII of 40 CFR 60.

[40 CFR 60.4218]

**E.4. Operating and Maintenance Period.** The owner or operator shall operate and maintain the engine that achieve the emission standards as required in 40 CFR 60.4205 (see Conditions E.1 and E.2.) according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

[40 CFR 60.4206]

##### **E.5. Fuel Requirements.**

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- (a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a) which requires all NRLM diesel fuel to meet the following per-gallon standards:
    - (1) Sulfur content. 500 parts per million (ppm) maximum.
    - (2) Cetane index or aromatic content, as follows:
      - (i) A minimum cetane index of 40; or
      - (ii) A maximum aromatic content of 35 volume percent.)
  - (b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) which requires all fuel meet the following per-gallon standards:
    - (1) Sulfur content.
      - (i) 15 ppm maximum for NR diesel fuel.
      - (ii) 500 ppm maximum for LM diesel fuel.
    - (2) Cetane index or aromatic content, as follows:
      - (i) A minimum cetane index of 40; or
      - (ii) A maximum aromatic content of 35 volume percent.)
  - (c) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.
- [40 CFR 60.4207]

**E.6. Monitoring Requirements.** The owner or operator shall install a non-resettable hour meter prior to startup of the engine. The owner or operator shall also meet the following monitoring requirements specified in 40 CFR 60.4211 (see Condition E.7).  
[40 CFR 60.4209]

**E.7. Compliance Requirements**

- (a) The owner or operator shall operate and maintain the stationary CIICE and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer, and also meet the applicable requirements of 40 CFR parts 89, 94 and/or 1068.
- (b) [NA - pre-2007 model]
- (c) *373 hp Fire Pump Engine.* The owner or operator of a CI fire pump engine that is required to comply with the emission standards specified in 40 CFR60.4205(c) (see condition E.1), shall comply by maintaining certification documentation that the engine meets the emission standards in 40 CFR60.4205(c). The engine must be installed and configured according to the manufacturer's specifications.
- (d) *1000 KW Engine.* The owner or operator complying with the emission standards specified in 40 CFR60.4205(d) (see Condition E.2) shall demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.
  - (1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in 40 CFR 60.4213 (see condition E.9).
  - (2) Establishing operating parameters to be monitored continuously to ensure the engine continues to meet the emission standards. The owner or operator must petition the EPD for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.
    - (i) Identification of the specific parameters proposed for continuously monitoring;

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- (ii) A discussion of the relationship between these parameters and NOx and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NOx and PM emissions;
  - (iii) A discussion of how the owner or operator will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
  - (iv) A discussion identifying the methods and the instruments that will be used to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
  - (v) A discussion identifying the frequency and methods for recalibrating the instruments the owner or operator will use for monitoring these parameters.
- (3) [NA, non-emergency engines].
- (e) 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, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone 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 ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under 40 CFR 60.4205 but not 40 CFR 60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.
- [40 CFR 60.4211]

#### **Test Methods and Procedures**

{Permitting Note. At such time that the manufacturer's certification is no longer valid (i.e. due to operation or maintenance practices that are inconsistent with the manufacturer's recommendations) the owner or operator shall conduct testing to demonstrating compliance with the standards as follow.}

#### **E.8. 373 hp Fire Pump Engines – Testing Requirements.**

- (a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F.
- (b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.
- (c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \quad (\text{Eq. 1})$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in 40 CFR 60.4213 of this subpart, as appropriate.

[40 CFR 60.4212]

#### **E.9. 1000 kW Emergency Engine –Testing Requirements.** The owner or operator shall conduct performance tests on the engine according to paragraphs (a) through (d) of this section:

### SECTION 3. EMISSION UNITS SPECIFIC CONDITIONS

- (a) Each performance test must be conducted according to the requirements in 40 CFR 60.8 (Appendix 3) and under the specific conditions that this Subpart specifies in table 7 (Appendix 6). The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.
- (b) The owner or operator shall not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 60.8(c) (Appendix 3).
- (c) The owner or operator shall 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 last at least 1 hour.
- (d) To determine compliance with the percent reduction requirement, the owner or operator shall follow the requirements as specified in paragraphs (d)(1) through (3) of this section.
  - (1) Equation 2 of this section shall be used to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 2})$$

Where:

$C_i$  = concentration of  $\text{NO}_x$  or PM at the control device inlet,

$C_o$  = concentration of  $\text{NO}_x$  or PM at the control device outlet, and

R = percent reduction of  $\text{NO}_x$  or PM emissions.

- (2) The owner or operator shall normalize the  $\text{NO}_x$  or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen ( $\text{O}_2$ ) using Equation 3 of this section, or an equivalent percent carbon dioxide ( $\text{CO}_2$ ) using the procedures described in paragraph (d)(3) of this section.

$$C_{\text{adj}} = C_d \frac{5.9}{20.9 - \% \text{O}_2} \quad (\text{Eq. 3})$$

Where:

$C_{\text{adj}}$  = Calculated  $\text{NO}_x$  or PM concentration adjusted to 15 percent  $\text{O}_2$ .

$C_d$  = Measured concentration of  $\text{NO}_x$  or PM, uncorrected.

5.9 = 20.9 percent  $\text{O}_2$ -15 percent  $\text{O}_2$ , the defined  $\text{O}_2$  correction value, percent.

$\% \text{O}_2$  = Measured  $\text{O}_2$  concentration, dry basis, percent.

- (3) If pollutant concentrations are to be corrected to 15 percent  $\text{O}_2$  and  $\text{CO}_2$  concentration is measured in lieu of  $\text{O}_2$  concentration measurement, a  $\text{CO}_2$  correction factor is needed. Calculate the  $\text{CO}_2$  correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.
  - (i) Calculate the fuel-specific  $F_o$  value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 4})$$

Where:

$F_o$  = Fuel factor based on the ratio of  $\text{O}_2$  volume to the ultimate  $\text{CO}_2$  volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is  $\text{O}_2$ , percent/100.

$F_d$  = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19,  $\text{dsm}^3/\text{J}$  ( $\text{dscf}/106 \text{ Btu}$ ).

$F_c$  = Ratio of the volume of  $\text{CO}_2$  produced to the gross calorific value of the fuel from Method 19,  $\text{dsm}^3/\text{J}$  ( $\text{dscf}/106 \text{ Btu}$ ).

- (ii) Calculate the  $\text{CO}_2$  correction factor for correcting measurement data to 15 percent  $\text{O}_2$ , as

### SECTION 3. EMISSION UNITS SPECIFIC CONDITIONS

follows:

$$X_{\text{CO}_2} = \frac{5.9}{F_o} \quad (\text{Eq. 5})$$

Where:

XCO2 = CO2 correction factor, percent.

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

(iii) Calculate the NOX and PM gas concentrations adjusted to 15 percent O2 using CO2 as follows:

$$C_{\text{adj}} = C_d \frac{X_{\text{CO}_2}}{\% \text{CO}_2} \quad (\text{Eq. 6})$$

Where:

Cadj = Calculated NOX or PM concentration adjusted to 15 percent O2.

Cd = Measured concentration of NOX or PM, uncorrected.

%CO2 = Measured CO2 concentration, dry basis, percent.

(e) To determine compliance with the NOX mass per unit output emission limitation, convert the concentration of NOX in the engine exhaust using Equation 7 of this section:

$$\text{ER} = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{\text{KW-hour}} \quad (\text{Eq. 7})$$

Where:

ER = Emission rate in grams per KW-hour.

Cd = Measured NOx concentration in ppm.

1.912x10-3 = Conversion constant for ppm NOx to grams per standard cubic meter at 25 degrees Celsius.

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

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$\text{ER} = \frac{C_{\text{adj}} \times Q \times T}{\text{KW-hour}} \quad (\text{Eq. 8})$$

Where:

ER = Emission rate in grams per KW-hour.

Cadj = Calculated PM concentration in grams per standard cubic meter.

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

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

[40 CFR 60.4213]

### **Recordkeeping Requirements**

### SECTION 3. EMISSION UNITS SPECIFIC CONDITIONS

**E.10. Manufacturer Certification Record.** The owner or operator shall keep records of the manufacturer certification for the engine for the entire life of the engine.  
[Rule 62-4.070(3), F.A.C.]

**E.11. Hours of Operation.** The owner or operator shall keep monthly records of the hours that the engines had operated for maintenance checks and readiness testing the last 12 months (see Condition E.7 (e)).  
[Rule 62-4.070(3), F.A.C.]

**E.12. Fuel Records.** The owner or operator shall keep records of the specifications of the fuel used to operate the engines (see Condition E.5).  
[Rule 62-4.070(3), F.A.C.]

**Subsection F.** This section addresses the following emissions unit.

EU ID Number	Description of Emissions Unit
006	Marine Loading Operations

This emission unit involves the uncontrolled loading of diesel and Jet A fuel.

#### **Essential Potential to Emit (PTE) Parameters**

**F.1. Throughput.** The throughput shall not exceed 75.6 million gallons (1.80 million barrels) per year of diesel and Jet A fuel calculated on a twelve-month rolling average basis.  
[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE)]  
{Permitting Note: The self imposed throughput limits contributes to maintaining the facility status as a synthetic minor for VOC and HAPs.}

#### **Recordkeeping Requirements**

**F.3. Throughput Records.** The owner or operator shall maintain records and conduct monthly calculations of the throughput in gallons of petroleum products per year based on a twelve-month rolling average basis.  
[Rule 62-4.070(3), F.A.C.]

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### **Appendix 1** **General Conditions** **(Rule 62-4.160, F.A.C.)**

1. Terms of Permit. The terms, conditions, requirements, limitations and restrictions set forth herein are accepted and must be completed by the Permittee and enforceable by the PPRAQD pursuant to this Code and Sections 403.141, 403.727, or 403.859 through 403.861 of the Florida Statutes (F.S.). The Permittee is placed on notice that PPRAQD will review this permit periodically and may initiate administrative and/or judicial action for any violation of the conditions by the Permittee, its agents, employees, servants or representatives.
2. Permit Validity. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the PPRAQD.
3. Disclaimer. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, or any violations of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other permit that may be required for other aspects of the total project which are not addressed in this permit.
4. Disclaimer. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interest have been obtained from the State of Florida. Only the Trustees of the Internal Improvement trust Fund may express State opinion as to title.
5. Liability. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the Permittee to cause pollution in contravention of Florida Statutes and DEP rule, unless specifically authorized by an order from the PPRAQD.
6. Operation and Maintenance. The Permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the Permittee to achieve compliance with the conditions of this permit, as required by county and state rules. This provision included the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by PPRAQD and DEP rules.
7. Onsite Inspection Activities. The Permittee, by accepting this permit, specifically agrees to allow authorized PPRAQD personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times (depending on the nature of the concern being investigated), access to the premises where the permitted activity is located or conducted to:
  - (a) Have access to and copy any records that must be kept under conditions of the permit;
  - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
  - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or PPRAQD and DEP rules.
8. Notice of Noncompliance. If, for any reason, the Permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the Permittee shall immediately provide PPRAQD with the following information:
  - (a) A description of and cause of noncompliance; and
  - (b) The period of noncompliance, including dates and times, or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The Permittee shall be responsible for any enforcement action by PPRAQD for penalties or for revocation of this permit.
9. Evidence Materials. By accepting this permit, the Permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted facility or

## SECTION 4. APPENDICES

activity, that are submitted to the PPRAQD, may be used by the PPRAQD as evidence in any enforcement proceeding arising under the Florida Statutes or F.A.C. rules, except where such use is prohibited by Section 403.111 and 403.73, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. Rule Changes. The Permittee agrees to comply with changes in Florida Department of Environmental Protection rules and Florida Statutes after a reasonable time for compliance; provided, however, the Permittee does not waive any other rights granted by Florida Statutes or DEP rules.
11. Permit Transfer. This permit is transferable only upon PPRAQD approval in accordance with Rule 62-4.120 and 62-730.300 F.A.C., as applicable. The Permittee shall be liable for any non-compliance of the permitted activity until the transfer approved by the PPRAQD.
12. Work Site Copy. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. Miscellaneous Compliance Requirements. The Permittee shall comply with the following:
  - (a) Upon request, the Permittee shall furnish all records and plans required under DEP rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the PPRAQD.
  - (b) The Permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recording for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by PPRAQD rule.
  - (c) Records of monitoring information shall include:
    1. The date, exact place, and time of sampling or measurements;
    2. The person responsible for performing the sampling or measurements;
    3. The dates analyses were performed.
    4. The person responsible for performing the analyses;
    5. The analytical techniques or methods used;
    6. The results of such analyses.
14. Information Submittal. When requested by the PPRAQD, the Permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the Permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the PPRAQD, such facts or information shall be corrected promptly.
15. Reporting Noncompliance. The Permittee shall report any periods of noncompliance to the PPRAQD immediately by phone 954-519-1499 or by Email [EPDHOTLINE@broward.org](mailto:EPDHOTLINE@broward.org). This also applies when the period of non-compliance is first determined after normal business hours or on weekends and holidays.
16. Rules Adoption. Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, as amended, are adopted by Broward County Code, Sec. 27-173.



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### Appendix 2

#### General Compliance Testing Requirements (Rule 62-297.310, F.A.C.)

*Unless otherwise specified in the permit, the following testing requirements apply to each emissions unit for which testing is required. The terms “stack” and “duct” are used interchangeably in this appendix.*

(“Department” refers to Florida Department of Environmental Protection.)

(“PPRAQD” refers to Broward County Pollution Prevention, Remediation and Air Quality Division.)

- TR1. Required Number of Test Runs.** For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
- TR2. Operating Rate During Testing.** Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]
- TR3. Calculation of Emission Rate.** For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
- TR4. Applicable Test Procedures.**
- Required Sampling Time.**
    - (1) Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
    - (2) N/A (Opacity Compliance Tests).
  - Minimum Sample Volume.** Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
  - Required Flow Rate Range.** For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
  - Calibration of Sampling Equipment.** Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

**TABLE 297.310-1 CALIBRATION SCHEDULE**

ITEM	MINIMUM	REFERENCE INSTRUMENT	TOLERANCE
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	CALIBRATION FREQUENCY		
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass	5° F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5° F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	see EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/- 0.001" mean of at least three readings; Max. deviation between readings, 0.004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, when 5% change observed, annually	Spirometer or calibrated wet test or dry gas test meter	2%
	2. One Point: Semiannually		
	3. Check after each test series	Comparison check	5%

- e. *Allowed Modification to EPA Method 5.* When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

[Rule 62-297.310(4), F.A.C.]

### **TR5.** Determination of Process Variables.

- a. *Required Equipment.* The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. *Accuracy of Equipment.* Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

### **TR6.** Sampling Facilities. The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must also comply with all applicable Occupational Safety and Health

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- Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.
- a. *Permanent Test Facilities.* The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.
  - b. *Temporary Test Facilities.* The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the PPRAQD elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the PPRAQD and remain on the emissions unit until the test is completed.
  - c. *Sampling Ports.*
    - (1) All sampling ports shall have a minimum inside diameter of 3 inches.
    - (2) The ports shall be capable of being sealed when not in use.
    - (3) The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
    - (4) For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
    - (5) On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.
  - d. *Work Platforms.*
    - (1) Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
    - (2) On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
    - (3) On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
    - (4) All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toe board, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.
  - e. *Access to Work Platform.*
    - (1) Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
    - (2) Walkways over free-fall areas shall be equipped with safety rails and toe boards.
  - f. *Electrical Power.*
    - (1) A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
    - (2) If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.
  - g. *Sampling Equipment Support.*
    - (1) A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on

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vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

- (a) The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
  - (b) A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
  - (c) The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
- (2) A complete monorail or dual rail arrangement may be substituted for the eyebolt and bracket.
  - (3) When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

**TR7.** Special Compliance Tests. When the PPRAQD, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the PPRAQD. [Rule 62-297.310(7)(b), F.A.C.]

**TR8.** Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the PPRAQD, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the PPRAQD shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of paragraph 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7)(c), F.A.C.]

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### **Appendix 3** **NSPS - Performance Testing** **(40 CFR 60.8)**

*[Administrator means the administrator of USEPA or the authorized representative – PPRAQD]*

- (a) *Frequency.* At such times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).
- (b) *Test methods and procedures.* Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.
- (c) *Test conditions.* Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
- (d) *Notice of testing.* The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.
- (e) *Testing facility requirements.* The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
  - (1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
  - (2) Safe sampling platform(s).
  - (3) Safe access to sampling platform(s).
  - (4) Utilities for sampling and testing equipment.
- (f) [NA, three separate runs not required]

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### **Appendix 4**

#### NSPS - Notification and Recordkeeping.

##### (40 CFR 60.7)

*[Administrator means the administrator of USEPA or the authorized representative – PPRAQD]*

- (a) *Notification format.* Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:
- (1) to (3) NA (new sources)
  - (4) Physical or operational changes. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
  - (5) to (7) NA (CMS, opacity).
- (b) to (e) NA (CMS)
- (f) *File maintenance.* Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including performance testing measurements; all monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:
- (1) to (2) NA (CEMS).
  - (3) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (f) of this section, if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.
- (g) *Similar notification.* If notification substantially similar to that in paragraph (a) of this section is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of paragraph (a) of this section.

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### **Appendix 5**

#### NSPS - General Notification and Reporting Requirements.

(40 CFR 60.19)

*[Administrator means the administrator of USEPA or the authorized representative – PPRAQD]*

- (a) *Time periods.* For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word "calendar" is absent, unless otherwise specified in an applicable requirement.
- (b) *Submittal deadlines.* For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable.
- (c) *Changing deadlines.* Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.
- (d) *Periodic reports submittals.* If an owner or operator of an affected facility in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such facility under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. The allowance in the previous sentence applies in each State beginning 1 year after the affected facility is required to be in compliance with the applicable subpart in this part. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.
- (e) *Common submittal schedule.* If an owner or operator supervises one or more stationary sources affected by standards set under this part and standards set under part 61, part 63, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State with an approved permit program) a common schedule on which periodic reports required by each applicable standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the applicable subpart in this part, or 1 year after the stationary source is required to be in compliance with the applicable 40 CFR part 61 or part 63 of this chapter standard, whichever is latest. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.
- (f) *Changes request.*
  - (1) (i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (f) (2) and (f) (3) of this section, the owner or operator of an affected facility remains strictly subject to the requirements of this part.
  - (ii) An owner or operator shall request the adjustment provided for in paragraphs (f) (2) and (f) (3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

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- (2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.
- (3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.
- (4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.



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### Appendix 6

TABLE 7 TO SUBPART IIII OF PART 60.—REQUIREMENTS FOR PERFORMANCE TESTS FOR STATIONARY CI ICE WITH A DISPLACEMENT OF  $\geq 30$  LITERS PER CYLINDER

[As stated in 40 CFR 60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of  $\geq 30$  liters per cylinder:]

<u>For Each</u>	<u>Complying with the requirement to</u>	<u>You must</u>	<u>Using</u>	<u>According to the following requirements</u>
1. Stationary CI internal combustion engine with a displacement of $\geq 30$ liters per cylinder.	a. Reduce NO <sub>x</sub> emissions by 90 percent or more.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A.	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O <sub>2</sub> at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A.	(b) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for NO <sub>x</sub> concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see 40 CFR 60.17).	(c) Measurements to determine moisture content must be made at the same time as the measurements for NO <sub>x</sub> concentration.
		iv. Measure NO <sub>x</sub> at the inlet and outlet of the control device.	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see 40 CFR 60.17).	(d) NO <sub>x</sub> concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1- hour or longer runs.
	b. Limit the concentration of NO <sub>x</sub> in the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, Appendix A.	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O <sub>2</sub> concentration of the stationary internal combustion engine exhaust at the sampling port	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A.	(b) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurement for NO <sub>x</sub> concentration.

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		location; and,		
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see 40 CFR 60.17).	(c) Measurements to determine moisture content must be made at the same time as the measurement for NO <sub>x</sub> concentration.
		iv. Measure NO <sub>x</sub> at the exhaust of the stationary internal combustion engine.	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see 40 CFR 60.17).	(d) NO <sub>x</sub> concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	c. Reduce PM emissions by 60 percent or more.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A.	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O <sub>2</sub> at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A.	(b) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A.	(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the inlet and outlet of the control device.	(4) Method 5 of 40 CFR part 60, appendix A.	(d) PM concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, Appendix A.	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O <sub>2</sub> concentration of the stationary	(2) Method 3, 3A, or 3B of 40 CFR part 60,	(b) Measurements to determine O <sub>2</sub> concentration must be made at the same

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		internal combustion engine exhaust at the sampling port location; and	appendix A.	time as the measurements for PM concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(3) Method 4 of 40 CFR part 60, appendix A.	(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the exhaust of the stationary internal combustion engine.	(4) Method 5 of 40 CFR part 60, appendix A.	(d) PM concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.