Title V Air Operation Permit Renewal
Permit No. 0112410-010-AV

APPLICANT

The applicant for this project is South Florida Water Management District (SFWMD),3301 Gun Club Road, Department 5500, West Palm Beach, Florida 33406, Mr. John Mitnik, Chief District Engineer.

FACILITY DESCRIPTION

SFWMD operates diesel engines for water pumping and emergency generators at Pump Stations Nos. S-9 and S-9A in accordance with Title V air operation permit No.0112410-009-AV issued 10/22/2013. Pump Stations S-9 and S-9A are collocated on the same property in Broward County. Florida. The pump station discharges water into Water Conservation Area 3-A for storage and use during dry times. Pump Station S-9A consists of three (3) 1,824 bhp diesel engines/pump combinations and one (1) spare 624 hp diesel. Two (2) 207 hp emergency generators and one (1) 102 hp emergency generator. Pump station S-9|A is generally used when water needs to be pumped under non-flood conditions. Pump Station S-9 is designed to move water for flood control purposes, or when there is need to lower the C-11 Canal in a timely manner, and operates Engines 1, 2, and 3 (see figure below) to drive three water pumps. Pump Station S-9A operates Engines 4 and 5 to drive two water pumps. Engines 6, 7, and 8 operate three emergency generators. Both stations share the two 25,000 gallon distillate oil aboveground storage tanks (ASTs)that are considered unregulated and insignificant emission units and/or activities, as well as miscellaneous surface coating activities.

Pump stations S-9 and S-9A discharges water into Water Conservation Area 3-A for storage and use during dry times.

The facility has an existing federally enforceable facility-wide restriction on annual fuel consumption (No.2 distillate) that will limit the potential NOx emissions below the major source threshold for PSD applicability (250 TPY).

The emission units are as follow:

E.U. ID	Engine No.	Pump Station	Serial No.	Site-Rated Horsepower	Manufacturer/ Function	Liters/Cylinder
004	1	S-9	8RB00325	1,824	Caterpillar Model No. 3606	18.5
005	2	S-9	8RB00330	1,824	Caterpillar Model No. 3606	18.5
006	3	S-9	8RB00348	1,824	Caterpillar Model No. 3606	18.5
007	4	S-9A	38S23502	624	Caterpillar Model No. 3412	2.3
008	5	S-9A	38S20601	624	Caterpillar Model No. 3412	2.3
009	6	S-9	45568800	207	Cummins	1.4
010	7	S-9	45568816	207	Cummins	1.4
011	8	S-9A	46123231	102	Cummins	0.9
012	9	S-9A	38S20809	624	Caterpillar Model No. 3412	2.3

(Note. Engine S/N 38S23502 was purchased before July 11, 2005 (NSPS cutoff date) and replaced similar existing S/N 38S20809 in March 2009.)

NOx, CO, PM, SOx, and other products of combustion are generated during the operation of the diesel-fired engines and insignificant activities.

APPLICABLE REGULATIONS

Title III: The facility is a natural minor source of VOC.
Title V: The facility is a Title V major source of HAP in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).
PSD: The facility is a PSD synthetic minor source of NOx in accordance with Rule 62-212.400, F.A.C.
NESHAP: The facility operates units subject to the 40 CFR 63, Subpart ZZZZ.
NSPS: The source operates no emission units that are subject to NSPS.

Florida Administrative Code

Rule 62.4.070(3) – Reasonable Assurance.
Rule 62-296.320(2) - Objectionable Odor Rule.
Rule 62-296.320(1) (a) – VOC or Organic Solvent Emissions
Rule 62-210-650 - Circumvention of air pollution control equipment

Federal Regulations.

The emission units are regulated under NESHAP - 40 CFR 63, Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines adopted and incorporated by reference in Rule 62-204.800(11) (b) 82 F.A.C, , except that the Secretary is not the Administrator for purposes of the authorities cited at 40 C.F.R 63.6670(c) (1) through (5).

The facility:

- *Title III:* The facility is a natural minor source of Hazardous Air Pollutants (HAP).
- *Title V*: The facility is a Title V major source of NOx in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).
- *PSD:* The facility is a Prevention of Significant Deterioration (PSD) synthetic minor source of Nitrogen Oxides in accordance with Rule 62-212.400, F.A.C.
- *CAM:* Compliance Assurance Monitoring (CAM) does not apply to any emissions unit.
- *NESHAP*: The facility operates stationary compression ignition reciprocating internal combustion engine (CI RICE) located in an area (i.e. non-major) source of HAP subject to 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (NESHAP).
- *NESHAP*: The facility does operate units subject to the National Emissions Standards for Hazardous A Code of Federal Regulations (CFR) 63.
- *NSPS* : The facility does not operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.
- Compliance Assurance Monitoring (CAM) does not apply to any emissions unit.
- *CAIR*: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

Summary of Primary Applicable Regulations	EU No(s)
Federal Rule Citations	

Summary of Primary Applicable Regulations	EU No(s)
NESHAP - 40 CFR 63, Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines adopted and incorporated by reference in Rule 62-204.800(11) (b) 82 F.A.C, , except that the Secretary is not the Administrator for purposes of the authorities cited at 40 C.F.R 63.6670(c) (1) through (5)	001, 002, 003, 004, 005,006, 007, 008, 009, 010, 011,012
State Rule Citations	
Rule 62-213, F.A.C. Title V major source of VOC	Facility- Wide
Rule 62-296.320(1) (a) F.A.C. VOC or Organic Solvent Emissions	Facility-Wide
Rule 62-296.320(2) F.A.C. - Objectionable Odor	Facility - Wide
Rule 62-210-650 F.A.C. Circumvention of air pollution control equipment	Facility-Wide
County Rule Citations	
Broward County Chapter 27 Air Pollution Control, Article IV, Sec. 27-175(b) & (d) **	Facility-Wide

** Not Federally Enforceable

PROJECT DESCRIPTION

The purpose of this permitting project is to renew air operation permit 0112410-009-AV. The permit application was submitted on March 7, 2018 to renew the existing). In addition to the permit renewal, the applicant requests the following:

- The three emergency generators be classified as "institutional emergency RICE pursuant to 40 CFR 63.6585(f) (3).
- To lower the federally enforceable facility-wide restriction on annual fuel consumption from 1,111,565 gallons to 1,024,931 gallons.
- The load capacity on the pump engines is controlled by the difference between the head water and tail water elevations. These water elevations are dictated by environmental conditions and not the permittee. Since the permittee does not have the ability to control the load capacity on engines during testing or pumping operations, the permittee requested allowance that each compliance test be conducted at the highest capacity as is practicable at the time of the scheduled test and omit additional testing if operating capacity exceeds 110% of capacity during compliance testing (Rule 62-297.310(3), F.A.C.)

The facility is classified as follows: Standard Industrial Classification (SIC) Code: 9511-Air, Water and Solid Waste Management, North American Industry Classification System (NAICS): 924110 - Administration of Air and Water Resource and Solid Waste Management Programs.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Event	**0112410-010-AV**	**0112410-011-AC**
Application Received	March 7, 2018	March 7, 2018
Fee Payment Received	N/A *	N/A*
Administrative Checklist	March 7, 2018	March 7, 2018

Completeness Determination	March 12, 2018	March 12, 2018
Determine Agency Action by	June 5, 2018	June 5, 2018

* Since South Florida Water Management District (SFWMD) is a Title V facility, the annual fee is paid to FDEP based on actual emissions reported in the Annual Operating Report for the previous year. Application for a Title V Air Operation Permit Renewal received on August 23, 2017, Completeness Review done on October 20, 2017, Determine Agency Action done on November 21, 2017.

PROJECT REVIEW

The permit 0112410-010-AV is the only permit since the issuance of renewal Air Operating Permit No. 0112410-009-AV. Inspection records and compliance reports show that the facility has been operating in compliance with permit requirements. Details of the project are found in the Technical Evaluation and Preliminary Determination (TEPD). This project does not change the permitting requirements or the regulatory classification of the facility as a major Title V source for VOC and NOXs. No changes to facility equipment or operations has been requested by the applicant. Changes to the permit language made part of this renewal are shown in ~~strike through~~ format for deletions and in double underline format for additions. For ease of identification, these changes have been highlighted in yellow in the draft permit document.

CONCLUSION

This project renews the Title V air operation permit No. 0112410-009-AV, which was effective on January 11, 2013. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, and 62-213, F.A.C.