
STATEMENT OF BASIS

Title V Air Operation Permit Renewal
South Florida Water Management District [SFWMD]
Pump Station S-7
DRAFT Title V Permit Renewal No. 0990354-010-AV

APPLICANT

The applicant for this project is South Florida Water Management District. The applicant's responsible official and mailing address is:

Mr. Peter Antonacci, Executive Director
South Florida Water Management District
3301 Gun Club Road, Dept. 1110
West Palm Beach, FL 33406

FACILITY DESCRIPTION

The applicant operates the SFWMD Pump Station S-7 facility, which is located in Palm Beach County on the North New River Canal about 26 miles south of Belle Glade at the intersection of the L-5, L-6 and L-18 canals on the east side of US Hwy 27 at 23000 US Hwy 27 at Broward/Palm Beach County line, Florida. The UTM coordinates are Zone 17, 546.181 km East and 2912.928 km North; Latitude: 26° 20' 08" North and Longitude: 80° 32' 12.3" West.

The Pump station S-7 discharges stored water from STA 3/4 into Conservation Area No. 2 and, under extreme water level conditions, to tide via the North New River Canal. The total designed capacity of S-7 is 2,490 CFS. Each horizontal pump is rated for 830 cfs. The pump station was designed to pump 0.75 inches of water per day from STA 3/4 within a 24-hour period. Pump station S-7 has operated since February 10, 1961.

This existing facility consists of three 800 brake horsepower (BHP) Fairbanks-Morse 5-cylinder opposed piston 2-cycle engines (FM model 38D8-1/8), two 380 BHP Cummins Onan emergency power generators, two 25,000 gallons above ground distillate oil fuel oil storage tanks, four 200 gallon above ground day tanks and miscellaneous surface coating activities, in addition to other insignificant /exempt activities. Ultra Low Sulfur (0.0015%S) diesel fuel is the primary fuel for all water pumps (3 main engines) and 2 emergency power generators.

The facility is presently classified as a synthetic-minor source under the Federal and State preconstruction review regulations (40 CFR 52.21, Chapters 62-210.300, 62-212.300, and 62-212.400, F.A.C.) based on potential emissions of nitrogen oxides more than 100 tons per year, but less than 250 tons per year. The facility is classified as a major source under the Title V operating permit program (40 CFR Part 70 and Chapter 62-210.200, F.A.C.). The facility is not subject to NSPS. The facility is further classified as a natural minor source of the Hazardous Air Pollutants (HAPs) with maximum individual HAP emissions less than 10 tons per year and total HAPs emissions of less than 25 tons per year. Nitrogen oxides (NOx) emissions, along with other products of combustion are generated during the operation of the internal combustion engines that can be fired on either distillate oil or low sulfur distillate oil.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit (0990354-008-AV) and to incorporate conditions from Permit No. 0990354-009-AC for the above referenced facility. Permit No. 0990354-009-AC reduces the existing facility-wide distillate fuel oil cap from 912,591 gallons to **885,660** gallons per any consecutive 12 months (Rolling) total to limit **NOx** emissions to **235.12 TPY**, which is below the major source threshold for PSD applicability (250 TPY). The reduction of the fuel cap is associated with an increase in the NOx emissions factor from 3.73 lb/mmbtu to 3.85 lb/mmbtu resulting from emission verification testing conducted on March 28, 2017.

STATEMENT OF BASIS

PROCESSING SCHEDULE AND RELATED DOCUMENTS

May 01, 2017: Health Department received application for Title V permit renewal

PRIMARY REGULATORY REQUIREMENTS

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

HAP: The facility is not identified as a major source of hazardous air pollutants (HAP).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C. **(for NO_x pollutant)**

PSD: The permittee requests a limit on fuel consumption to establish synthetic PSD minor status in accordance with Rule 62-212.400 F.A.C.

NSPS: The facility does not operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility does operate units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63. [40 CFR 63 Subpart ZZZZ “National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines”]

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) does not apply to any of the units at the facility.

GHG: The facility is not identified as a major source of greenhouse gas (GHG) pollutants.

PROJECT REVIEW

This renewed Title V Air Operation permit (0990354-010-AV) incorporates the following changes made in Air Construction Permit (0990354-009-AC) which is being processed concurrently:

Permit No. 0990354-009-AC reduces the existing facility-wide distillate fuel oil cap from 912,591 gallons to **885,660 gallons** per any consecutive 12 months (Rolling) total to limit **NO_x** emissions to **235.12 TPY** (reduced from 246.82 TPY in previous permit 008-AV), which is below the major source threshold for PSD applicability (250 TPY). The reduction of the fuel cap is associated with an increase in the NO_x emissions factor from 3.73 lb/mmbtu to 3.85 lb/mmbtu resulting from emission verification testing conducted on March 28, 2017.

CONCLUSION

This project renews Title V air operation permit No. 0990354-008-AV, which was issued on 12/20/2012, and incorporates conditions from Permit No. 0990354-009-AC (concurrent project) as described above. 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.