Florida Department of
Environmental Protection
Northwest District
160 W. Government Street, Suite 308
Pensacola, Florida 32502-5740

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

Sent by Electronic Mail – Received Receipt Requested

PERMITTEE

City of Tallahassee
300 South Adams Street
Tallahassee, Florida 32301

Authorized Representative:
Jim Oskowis, General Manager

Air Permit No. 0730113-002-AC
Permit Expires: January 12, 2016

Thomas P. Smith Water Reclamation Facility
Minor Source Air Construction Permit
Modify Permit 0730113-001-AC

This is the final air construction permit, authorizing modifications to permit 0730113-001-AC, which include a name change from the Thomas P. Smith Advanced Wastewater Treatment Plant to the Thomas P. Smith Water Reclamation Facility; an address change (numerical correction, not geographical) from 3805 Springhill Road to 4505-B Springhill Road; adding the use of digester gas as a fuel in the Rotary Drum Thermal Sewage Sludge Dryer; adding the use of existing Boilers No. 1 and No. 3, to provide heat to existing digesters 1 and 3; and renaming Boiler No.1 to Boiler No. 4. Existing digester gas Boiler No. 2 will be taken out of service. These existing digester gas boilers have not been previously permitted. The proposed work will be conducted at the Thomas P. Smith Water Reclamation Facility, which is a Sewerage System, including Sewage Treatment Equipment (Standard Industrial Classification No. 4952). The facility is located in Leon County at 4505-B Springhill Road in Tallahassee, Florida. The UTM coordinates are Zone 16, 242.705 km East, and 3365.076 km North. As noted in the Final Determination provided with this final permit, no changes were made to the draft permit.

This final permit is organized by the following sections.

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Emissions Unit Specific Conditions

Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C., and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C., for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a

copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Pensacola, Florida

/s/ 4/24/12

Rick Bradburn, Air Program Administrator (Date)

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on April 24, 2012 to the persons listed below.

Jim Oskowis, City of Tallahassee: jim.oskowis@talgov.com
Russell Wider, P.E.; City of Tallahassee: russell.wider@talgov.com
Bill Evans, DEP Northwest District Water Facilities Program: bill.evans@dep.state.fl.us
DEP Northwest District Branch Office, Tallahassee

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

/s/ 4/24/12

(Clerk) (Date)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

The existing facility permit 0730113-001-AC, effective date January 12, 2012 was for the construction of a thermal sewage sludge drying system featuring a direct-heat concurrent, triple-pass rotary drum sewage sludge dryer (a 20 MMBtu/hr heat input Andritz dryer), conveying equipment, two dried product storage silos, a venturi scrubber and a pellet cooler. Also included in existing facility permit 0730113-001-AC are two new digester gas boilers, two new flares and an existing emergency generator. The new equipment will replace an oil process heater, two flares and a Dragon dryer.

REGULATED EMISSION UNITS

Facility ID No. 0730113	
ID No.	**Emission Unit Description**
001	Rotary Drum Thermal Sewage Sludge Dryer (NEW): Andritz DDS50, 20 MMBtu/hr
005	Flares No. 1 & No. 2(NEW replacement): both shrouded, 1 ft diameter, 15 ft stack, 11 MMBtu/hr, 15,907 scf/hr
009	CI RICE Engine (EXISTING): Generac 95A01180-S, 35 KW, 3.0 liter, 52 Hp

UNREGULATED EMISSION UNITS

Facility ID No. 0730113	
ID No.	**Emission Unit Description**
007	Boilers 101 & 102 (NEW): both Cleaver Brooks CBLE-150-HW, 7.2 MMBtu/hr

Proposed Project

This project will modify permit 0730113-001-AC by including a name change from the Thomas P. Smith Advanced Wastewater Treatment Plant to the Thomas P. Smith Water Reclamation Facility; changing the address (numerical correction, not geographical) from 3805 Springhill Road to 4505-B Springhill Road; adding the use of digester gas as a fuel in the Rotary Drum Thermal Sewage Sludge Dryer; adding the use of existing Boilers No. 1 and No. 3, used to provide heat to existing digesters 1 and 3; and renaming Boiler No. 1 to Boiler No. 4. Existing digester gas Boiler No. 2 will be taken out of service. These existing digester gas boilers have not been previously permitted. Potential emissions of CO, NO_X, PM, PM_{10}, SO_2 and VOC increase by 1.29, 1.53, 0.12, 0.12, 0.11 and 0.083 tons per year, respectively.

REGULATED EMISSION UNITS

Facility ID No. 0730113	
ID No.	**Emission Unit Description**
001	Rotary Drum Thermal Sewage Sludge Dryer (NEW): Andritz DDS50, 20 MMBtu/hr

UNREGULATED EMISSION UNITS

Facility ID No. 0730113	
ID No.	**Emission Unit Description**
002	Digester Gas Boilers No. 4 - 1.34 MMBtu/hr heat exchanger & No. 3 - 1.125 MMBtu/hr heat exchanger

REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is not a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS (DRAFT)

1. Permitting Authority: The permitting authority for this project is the Northwest District Air Resource Management Program, Florida Department of Environmental Protection (Department). The District's mailing address is 160 W. Government Street, Suite 308, Pensacola, Florida 32502-5740. All documents related to applications for permits to operate an emissions unit shall be submitted to the District Office.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the District Office at the above address or nwdair@dep.state.fl.us.

3. Appendices: The following Appendices are attached as part of this permit:
   a. Appendix A. Citation Formats and Glossary of Common Terms;
   b. Appendix B. General Conditions; and
   c. Appendix C. Common Conditions

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. Asbestos. This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source. [40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

6. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

7. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

8. Source Obligation:
   (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
   (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   [Rule 62-212.400(12), F.A.C.]

A. Rotary Drum Sewage Sludge Thermal Dryer

This section of the permit addresses the following emissions unit.

ID No.	Emissions Unit Description
001	Rotary Drum Thermal Sewage Sludge Dryer: (NEW): Andritz DDS50, 20 MMBtu/hr

This section is for a new Thermal Sewage Sludge Drying System, permitted under permit 0730113-001-AC, and featuring a direct-heat concurrent, triple-pass rotary drum dryer (a 20 MMBtu/hr heat input Andritz dryer), conveying equipment, two dried product storage silos with baghouses, a venturi scrubber, and a pellet cooler. The dryer is fueled by natural gas, digester gas, or a blend of natural gas and digester gas.

The thermal sewage sludge dryer is subject to 40 CFR 61 Subpart E - National Emission Standard for Mercury, as 40 CFR 61.51(m) defines *Sludge dryer* as a device used to reduce the moisture content of sludge by heating to temperatures above 65 °C (ca. 150 °F) directly with combustion gases.

For this construction permit modification, digester gas is added as a fuel, separate or as a blend with natural gas, for the thermal sewage sludge dryer.

The following specific conditions apply to the emissions unit listed above:

1. Previous Permits: This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for the change noted below, the unit remains subject to the conditions of all other legally binding air construction and operating permits. [Rules 62-4.070(3) and 62-210.300(1), F.A.C.]
2. New Equipment: Except for the change noted below, the new equipment authorized by this permit shall be subject to the same requirements, such as, but not limited to; emissions standards, recordkeeping, compliance testing and fuels limitations previously established for this emissions unit in all other legally binding air construction and operating permits. [Rules 62-4.070(3) and 62-210.300(1), F.A.C.]

PERFORMANCE RESTRICTIONS

3. Authorized Fuel. The dryer shall be fueled by natural gas, digester gas, or a blend of natural gas and digester gas. [Permit applications 0730113-001-AC and 0730113-002-AC, and Rules 62-210.200(PTE) and 62-4.160(2), F.A.C.]

B. Digester Gas Boilers No. 4 and No. 3

This section of the permit addresses the following emissions unit.

ID No.	Emissions Unit Description
002	Digester Gas Boilers No. 4 - 1.34 MMBtu/hr heat exchanger & No. 3 - 1.125 MMBtu/hr heat exchanger

This construction permit modification authorizes operation of existing digester gas Boilers No. 1 and No. 3, which have maximum heat input rates of 1.34 and 1.125 MMBtu/hr, respectively. The digester gas boilers run primarily on digester off-gas, supplemented with natural gas. Boiler No. 1 is renamed Boiler No. 4. The boilers are conditionally and categorically exempt by Rule 62-210.300 (3)(a)33., F.A.C., and are unregulated emissions units. Existing digester gas Boiler No. 2 will be taken out of service. These existing digester gas boilers have not been previously permitted.

EQUIPMENT

1. Boilers No. 4 and No. 3. Permittee is authorized to operate existing anaerobic digester gas Boilers No. 4 and No. 3. [Permit application 0730113-002-AC (letter from Permittee dated January 27, 2012)]

PERFORMANCE RESTRICTIONS

2. Authorized Fuel. Boilers No. 4 and No. 3 shall be fired with digester gas, natural gas or a blend of natural gas and digester gas. [Rule 62-210.200(PTE), F.A.C., and permit application 0730113-002-AC (letter from Permittee dated January 27, 2012)]

3. Restricted Operation. The hours of operation of Boilers No.4 and No. 3 are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]