



# FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest District Office  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637-0926

RICK SCOTT  
GOVERNOR

CARLOS LOPEZ-CANTERA  
LT. GOVERNOR

HERSCHEL T. VINYARD JR.  
SECRETARY

## FINAL PERMIT

### PERMITTEE

City of Largo-WWTP  
5100 150<sup>th</sup> Avenue North  
Clearwater, FL 33760

Authorized Representative:  
Mr. Gary Glascock, Assistant Director of  
Environmental Services

Air Permit No. 1030060-009-AF  
Permit Expires: 10/23/2019  
Site Name: Largo Wastewater Reclamation  
Facility  
Federally Enforceable State Operation Permit  
(FESOP)  
Project: Operation Permit Renewal

This is the final permit to renew Air Operation Permit No. 1030060-008-AF for a wastewater reclamation facility (Standard Industrial Classification No. 4952). The facility is located in Pinellas County at 5000 150<sup>th</sup> Avenue North in Clearwater, Florida. The UTM coordinates are Zone 17, 332.48 km East, and 3088.00 km North.

This final permit is organized by the following sections:

Section 1. General Information

Section 2. Administrative Requirements and Facility-wide Specific Conditions

Section 3. Emissions Unit Specific Conditions

Section 4. Appendices

Due to 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 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.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this final permit. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. A petition for administrative hearing must contain the information set forth below and must be filed (received) with the Agency Clerk in the Office of General Counsel, 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000, [Agency.Clerk@dep.state.fl.us](mailto:Agency.Clerk@dep.state.fl.us), before the deadline. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, any email address, telephone number and any facsimile number of the petitioner; the name, address, any email address, telephone number, and any facsimile number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise

statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this final permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

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, 3900 Commonwealth Boulevard, Mail Station #35, 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 thirty days after this order is filed with the clerk of the Department.

Executed in Hillsborough County, Florida

*for* 

Kelley M. Boatwright  
Permitting & Waste Cleanup  
Program Administrator  
Southwest District

10/23/2014  
Effective Date

### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Permit and the Appendices) 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 the date indicated below to the persons listed below.

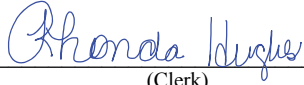
Mr. Gary Glascock, City of Largo (gjonesgl@largo.com)

Mr. Richard J. Mushaben, City of Largo (rmushabe@largo.com)

Mr. Sherrill Culliver, PCAQD (sculliver@co.pinellas.fl.us)

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.

  
(Clerk)

10/23/2014  
(Date)

---

## SECTION 1. GENERAL INFORMATION (FINAL)

---

### FACILITY AND PROJECT DESCRIPTION

#### Existing Facility

This is an existing wastewater reclamation facility. The existing facility consists of the following emission units.

Facility ID No. 1030060	
EU ID No.	Emissions Unit Description
001	Two Sewage Sludge Drying Trains with Common Afterburner
005	Two Product Storage Silos
006	Dried Sludge Truck Loading Area

#### Exempt Emission Sources/Activities

Wastewater treatment plant operations [Rule 62-4.040, F.A.C.]

*{Permitting Note: The facility is not subject to 40 CFR 63, Subpart VVV – Publicly Owned Treatment Works (POTW). The wastewater treatment operation has a capacity of 18 million gallons per day and has not been reconstructed.}*

#### FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAPs).
- 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 62-213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.
- This facility is a synthetic non-Title V source for the pollutant PM10.

#### PERMIT HISTORY/AFFECTED PERMITS

This permit replaced Operation Permit 1030060-008-AF.

## SECTION 2. ADMINISTRATIVE REQUIREMENTS AND FACILITY-WIDE SPECIFIC CONDITIONS (FINAL)

---

1. Permitting Authority - The permitting authority for this project is the Florida Department of Environmental Protection (Department), Southwest District Office's Air and Solid Waste Permitting Program. The mailing address and phone number is:

Florida Department of Environmental Protection  
Southwest District Office  
Air and Solid Waste Permitting Program  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637-0926  
Telephone: 813-470-5700

All documents related to applications for permits shall be submitted to the above address.

2. Compliance Authority - All documents related to compliance activities such as reports, tests, and notifications shall be submitted to Pinellas County Air Quality Division (PCAQD). The mailing address and phone number of the Local Air Program is:

Pinellas County Air Quality Division  
509 East Avenue South, Suite 138  
Clearwater, Florida 33756  
Telephone: 727-464-4422

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;
- c. Appendix C. Common Conditions;
- d. Appendix D. Common Testing Requirements;
- e. Appendix E. NESHAP 40 CFR 61, Subpart A; and
- f. Appendix F. NESHAP 40 CFR 61, Subpart E.

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, 62-213, 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. 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.]

6. Modifications - Unless otherwise exempt by rule, the permittee shall not initiate any construction, reconstruction, or modification at the facility and shall not install/modify any pollution control device at the facility without obtaining prior authorization from the Department. Modification is defined as: Any physical change or changes in the method of operations or addition to a facility that would result in an increase in the

## SECTION 2. ADMINISTRATIVE REQUIREMENTS AND FACILITY-WIDE SPECIFIC CONDITIONS (FINAL)

---

actual emissions of any air pollutant subject to air regulations, including any not previously emitted, from any emission unit or facility.

[Rules 62-210.200 - Definition of “Modification” and 62-210.300(1)(a), F.A.C.]

7. Annual Operating Report - On or before **April 1** of each year, the permittee shall submit a completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility" (AOR) for the preceding calendar year. The report may be submitted electronically in accordance with the instructions received with the AOR package sent by the Department, or a hardcopy may be sent to the Compliance Authority.  
[Rule 62-210.370(3), F.A.C.]
8. Operation Permit Renewal Application - A completed application for renewal of the operation permit shall be submitted to the Permitting Authority with a copy to PCAQD (Compliance Authority) no later than 60 days prior to the expiration date of this operation permit. To properly apply for an operation permit, the applicant shall submit the following:
  - a. the appropriate permit application form (*see current version of Rule 62-210.900, F.A.C. (Forms and Instructions), and/or FDEP Division of Air Resource Management website at: <http://www.dep.state.fl.us/air/>*);
  - b. the appropriate operation permit application fee from Rule 62-4.050(4)(a), F.A.C.;
  - c. copies of the most recent compliance test reports required by Specific Condition No. A.14., and B.8., if not previously submitted;
  - d. copies of the most recent month of records/logs specified in Specific Condition No(s). A.15., A.16., and B.9.; and
  - e. any proposed revisions to the most recently approved Operation and Maintenance (O & M Plan), if applicable.

[Rules 62-4.030, 62-4.050, 62-4.070(3), 62-4.090, 62-210.300(2), and 62-210.900, F.A.C.]

### FACILITY-WIDE SPECIFIC CONDITIONS

9. General Pollutant Emission Limiting Standards – Objectionable Odor: No person shall cause, suffer, allow, or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An “Objectionable Odor” is defined as 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.

[Rules 62-210.200 and 62-296.320(2), F.A.C.; Pinellas County Code, Section 58-178]

### SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

#### A. EU No. 001 – Two Sewage Sludge Drying Trains with Common Afterburner

This section of the permit addresses the following emissions unit (EU).

EU ID No.	Emissions Unit Description
001	<p>There are two sewage sludge drying trains operating at the wastewater treatment plant. The two trains are identical and are located in the Pelletizing Building. The trains are designated as Train No. 1 and Train No. 2. Train No. 1 is located on the west side of the building and Train No. 2 is located on the east side of the building. Only one train operates at any one time. They share a common afterburner.</p> <p><u>Product Manufacturing Description:</u> In each train, dewatered sludge cake is conveyed to a wet sludge storage bin of 510 ft<sup>3</sup> capacity. The sludge cake is then conveyed to a pug mill where it is mixed with recycled dried solids from the dried solids recycle bin. This sludge mixture is then conveyed to the rotary drum dryer. The dryer dries the sludge at a temperature of approximately 1000 °F with a direct, end-fired furnace. Heat for the dryer is supplied by natural gas burners at a maximum heat input rate of 12 MMBTU/hr. The mixed feed is dried and pelletized as it passes through the dryer into a solids settling chamber where most of the dried material is separated from the gas stream. Here the product is separated via screens into:</p> <ol style="list-style-type: none"><li>1. oversized material, which is conveyed to a grinder and redirected to the dried solids recycle bin;</li><li>2. final product, which is conveyed to one of the two product storage silos or redirect to the grinder;</li><li>3. undersized material, which is conveyed to the dried solids recycle bin;</li><li>4. trash or debris, which is directed into dumpsters and disposed of in an appropriate method.</li></ol> <p><u>Gas Stream Description for Each Train:</u> The gas stream from the settling chamber and from the fugitive dust system (screens and grinder) enters a cyclonic separator (Fisher-Klosterman Model XQ Series XQ340-27) which removes finer sized particulates from the gas stream, then to a venturi scrubber with a cyclonic separator (Fisher-Klosterman Model MS-650H) for further removal of particulates and disentrainment of water droplets. The gas stream then enters a Huntington Energy System, Inc., Model #65 three-chamber, regenerative, ceramic bed-type afterburner (RTO, or regenerative thermal oxidizer) for control of VOC, ammonia, and other odorous air emissions. The afterburner operates at a minimum temperature of 1100 °F with a residence time of at least one second. The afterburner, which is rated at a design heat input rate of 2.2 MMBTU/hr., is fired exclusively on natural gas.</p> <p><u>Effluent:</u> Effluent from the cyclonic separator and venture scrubber's cyclonic separator is transferred to the wastewater treatment plant's influent line.</p>

#### PERFORMANCE RESTRICTIONS

- A.1.** Federal Regulatory Requirements - This emission unit is subject to 40 CFR 61, Subpart E – National Emission Standard for Mercury and 40 CFR 61, Subpart A – National Emission Standards for Hazardous Air Pollutants, General Provisions, which is adopted by reference in Rule 62-204.800, F.A.C.

### SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

#### A. EU No. 001 – Two Sewage Sludge Drying Trains with Common Afterburner

##### 40 CFR 61, Subpart E Applicable Provision References

*(Note: Entire section applies unless otherwise noted with specific applicable subsection references)*

§ 61.50 Applicability.

§ 61.51 Definitions.

§ 61.52 Emission standard.

§ 61.52(b)

§ 61.53 Stack sampling.

§ 61.53 (d)

§ 61.54 Sludge sampling.

§ 61.55 Monitoring of emissions and operations.

§ 61.55(a)

§ 61.56 Delegation of authority.

[Rule 62-204.800(10), F.A.C.; 40 CFR 61, Subpart E]

- A.2.** Permitted Capacity - The total sludge input rate for each dryer shall not exceed 32,680 pounds per hour daily average.

*(Permitting Note - See Appendix D, Condition 1, for operation rate during testing requirements.)*

[Rule 62-210.200 (definition of Potential to Emit), F.A.C.; Construction Permit 1030060-005-AC]

- A.3.** Authorized Fuel - The sludge dryers and afterburner shall be only fired with natural gas.

[Rule 62-210.200(definition of Potential to Emit), F.A.C.; Construction Permit 1030060-005-AC]

- A.4.** Heat Input Limitation – The heat input for each drying train (including dryer and afterburner) shall not exceed 14.2 MMBTU per hour daily average.

[Rule 62-210.200 (definition of Potential to Emit), F.A.C.; Construction Permit 1030060-005-AC]

- A.5.** Operation Limitation – Only one drying train may operate at any one time.

[Rule 62-210.200 (definition of Potential to Emit), F.A.C.; Construction Permit 1030060-005-AC]

- A.6.** Hours of Operation – The hours of operation are not limited (i.e., 8760 hours per year).

[Rules 62-4.070(3) and 62-210.200 (definition of Potential to Emit), F.A.C.; Construction Permit 1030060-005-AC]

#### EMISSIONS STANDARDS

- A.7.** Mercury Emissions Standard – Mercury emissions shall not exceed 3200 grams per 24-hour period.

[40 CFR 61.52(b), Construction Permit 1030060-005-AC]

- A.8.** Visible Emissions Limitation – In order to provide reasonable assurance of proper operation and maintenance of the pollution control devices, visible emissions from the afterburner shall not exceed 5% opacity.

[Rule 62-4.070(3) and 62-210.650, F.A.C.]



### SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

#### A. EU No. 001 – Two Sewage Sludge Drying Trains with Common Afterburner

#### COMPLIANCE TESTING REQUIREMENTS

##### A.9. Compliance Tests –

- a. During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), each sludge drying train shall be tested for odor and visible emissions.
- b. Between 120 days and 180 days prior to the expiration date of this permit, one of the two drying trains shall be tested for mercury emissions.

If the mercury emissions test shows mercury emissions exceed 1600 g per 24-hour period, demonstrated either by stack sampling according to 40 CFR 61.53 or sludge sampling according to 40 CFR 61.54, the permittee shall monitor mercury emissions at intervals of at least once per year by use of EPA Method 105 or the procedures specified in 40 CFR 61.53(d)(2) and (4). The results of monitoring shall be reported and retained according to CFR 61.53(d)(5) and (6) or 40 CFR 61.54(f) and (g).

[Rule 62-297.310, F.A.C.; 40 CFR 61.55(a)]

- A.10. Compliance Test Requirements** - Compliance tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.  
[Rule 62-297.310, F.A.C.]

- A.11. Compliance Test Method(s)** - Required compliance tests shall be performed in accordance with the following reference method(s).

Method(s)	Description of Method and Comments
EPA Method 101A or EPA Method 105	Determination of Particulate and Gaseous Mercury Emissions from Sewage Sludge Incinerators Determination of Mercury in Wastewater Treatment Plant Sewage Sludges
EPA Method 9	Visual Determination of the Opacity of Emissions from Stationary Sources
ASTM Method E679-04 or more recent version	Standard Practice for Determination of Odor and Taste Thresholds by a Forced-Choice Ascending Concentration Series Method of Limits

EPA Method 9 is contained in 40 CFR 60, Appendix A, adopted by reference in Rule 62-204.800(8), F.A.C. EPA Methods 101A and 105 are contained in 40 CFR 61, Appendix B, adopted by rule 62-204.800(10), F.A.C. No other methods may be used unless prior written approval is received from the Department or PCAQD. The minimum requirements for stationary point source emissions test procedures and reporting shall be in accordance with Rule 62-297, F.A.C., 40 CFR 60, Appendix A, and 40 CFR 61, Appendix B.

[Rule 62-204.800 and 62-297.100, F.A.C.; 40 CFR 61.53 and 61.54; Appendix A of 40 CFR 60; and Appendix B of 40 CFR 61]

### SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

#### A. EU No. 001 – Two Sewage Sludge Drying Trains with Common Afterburner

##### MONITORING REQUIREMENTS

- A.12. Afterburner Monitoring Requirements** – When drying sewage sludge, the afterburner shall operate at a minimum temperature of 1100 °F and a minimum gas residence time of 1.0 second. The permittee shall operate adequate instrumentation to continuously monitor and record the afterburner's operating temperature.  
[Rule 62-4.070(3), F.A.C.; Construction Permit 1030060-005-AC]

##### NOTIFICATION REQUIREMENTS

- A.13. Test Notification** - The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. The notification must include the following information: the date, time, and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and the telephone number of the person conducting the test.

*{Permitting Note - The notification should also include the relevant emission unit ID No(s) , test method(s) to be used, and pollutants to be tested.}*

[Rules 62-4.070(3) and 62-297.310(7)(a)9., F.A.C.]

##### RECORDKEEPING AND REPORTING REQUIREMENTS

- A.14. Compliance Test Reports** - The permittee shall prepare and submit reports for all required compliance tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. All test reports submitted to the Department and PCAQD shall include, at a minimum, the following information for the test period:

- Sludge input rate (tons/hr.) to the dryer.
- Total heat input rate (MMBTU/hr).
- Copies of the dryer's records indicating the sludge input rate.
- Copies of the afterburner's contiguous temperature chart recorder.
- Calculations of the afterburner's gas residence time.
- Control device operating parameters, such as scrubber flow rate and pressure drop.

Failure to submit the above information or operating at conditions which do not reflect normal operating conditions may invalidate the test to provide reasonable assurance of compliance.

[Rule 62-297.310(8), F.A.C.; Construction Permit 1030060-005-AC]

- A.15. Sludge Input Rate Determination and Recordkeeping** - The total sludge input rate of each dryer shall be determined by the following:

$$M = \frac{C (\%R - \%C)}{(\%R - \%M)}$$

Where: M = Dryer Total Sludge Input Rate (lbs./hr.)

### SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

#### A. EU No. 001 – Two Sewage Sludge Drying Trains with Common Afterburner

C = Wet Sludge Feed Cake to Pugmill (lbs./hr.)

%M = Percent Solids of Dryer Input (Feed)

%C = Percent Solids of Wet Sludge Feed Cake

%R = Percent Solids of Recycled Dry Material to Pugmill

- a. Continuously monitor and record hourly the wet sludge feed cake to the pugmill.
- b. Perform dry solids tests every two hours on the dryer feed, the wet sludge feed cake, and recycled dry material.
- c. At the end of each day, the average for each of the above measurements will be applied to the formula above and the dryer input (feed) rate calculation will be completed.

The above procedure will provide a daily average dryer input (feed) rate. This procedure will be used each day of operation and will be used during compliance testing where the calculations will be completed and reported for the actual period of the test and not the entire operating day.

[Construction Permit 1030060-005-AC]

- A.16. Natural Gas Heat Input Rate Records** - The total maximum natural gas heat input rate (MMBTU/hr.) of each drying train (dryer + afterburner) shall be determined by the afterburner and the dryer burner gas meters. The permittee shall maintain records of the dryer hours of operation and the amount of gas fired in the dryers and afterburner daily. Records shall also be maintained (for comparison purposes) of the main gas meter.

[Construction Permit 1030060-005-AC]

- A.17. Operation and Maintenance (O & M) Plan** – This emissions unit includes the following pollution control devices:

- a. Fisher-Klosterman Model XQ Series XQ340-27 Dual Cyclones for each sludge drying train
- b. Fisher-Klosterman Model MS-650H venturi scrubber with cyclonic separator for each sludge drying train
- c. Huntington Energy System, Inc., Model # 65 regenerative afterburner shared by both sludge drying trains.

For each control device listed above, the permittee shall maintain and implement an O & M Plan to include a schedule for the maintenance and inspection of each control device, collection systems, and auxiliary equipment. Records of inspections, maintenance, and performance data of control devices and auxiliary equipment shall be retained at the facility for a minimum of two (2) years and shall be made available to the Compliance Authority upon request. The O & M Plan may be amended with the prior approval of the Compliance Authority. At a minimum, the O & M Plan shall include:

1. The operating parameters of the pollution control device.
2. Timetable for the routine maintenance of the pollution control device as specified by the manufacturer.
3. Timetable for routine periodic observations of the pollution control device sufficient to ensure proper operations.
4. A list of the type and quantity of the required spare parts for the pollution control device, which are stored on the premises of the permit applicant.

### **SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)**

---

#### **A. EU No. 001 – Two Sewage Sludge Drying Trains with Common Afterburner**

5. A record log which will indicate, at a minimum:
  - a. When maintenance and observations were performed;
  - b. What maintenance and observations were performed;
  - c. Who performed said maintenance and observations; and
  - d. Acceptable parameter ranges for each operational check.

[Rule 62-4.070(3), F.A.C. and Pinellas County Code, Section 58-128(a)]

### SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

#### **B. EU No(s). 005 and 006 – Product Storage Silos and Dried Sludge Truck Loading Area with Common Baghouse**

This section of the permit addresses the following emissions units (EUs).

EU ID No.	Emissions Unit Description
005	<b>Two Product Storage Silos:</b> The storage and loadout operations consist of two dried pelletized sludge product storage silos designated as Silo No. 1 and Silo No. 2. Silo No. 1 is located to the north of Silo No. 2. Dried pelletized sludge is conveyed from the Pelletizing Building via 12” screw conveyors to the silos where it is loaded at the top of each silo. Only one silo may be loaded at any one time. Particulate emissions from loading the silos are controlled by an American Air Filter, Millennium 8-96-1015, dust collector system (baghouse) or equivalent.
006	<b>Dried Sludge Truck Loading Area:</b> Dried pelletized sludge is conveyed from either storage silo via a 16” screw conveyor to a retractable bulk truck loading spout. Particulate emissions from this loading operation are controlled by the same baghouse that controls emissions from Emission Unit No. 005.

#### **PERFORMANCE RESTRICTIONS**

##### **B.1. Permitted Capacity –**

- The dried sludge loading rate for each silo shall not exceed 1.0 tons per hour daily average and only one (1) silo may be loaded at any one time.
- The loading rate for the truck loading operation shall not exceed 25.6 tons per hour of dried sludge daily average.

{Permitting Note: See Appendix D, Condition 1, for Operation Rate during Testing requirements.}  
[Rule 62-210.200 (definition of Potential to Emit), F.A.C.; Construction Permit 1030060-005-AC]

##### **B.2. Restriction Operation -** The hours of operation are not limited (8760 hours per year). [Rule 62-210.200 (definition of Potential to Emit), F.A.C.; Construction Permit 1030060-005-AC]

#### **EMISSIONS STANDARDS**

##### **B.3. Visible Emissions Limitations –** In order to provide reasonable assurance of proper operation and maintenance of the common baghouse, visible emissions from the baghouse shall not exceed 5% opacity. [Rule 62-4.070(3) and 62-210.650, F.A.C.]

#### **COMPLIANCE TESTING REQUIREMENTS**

##### **B.4. Visible Emission Testing Requirements –** The permittee shall test the common baghouse for visible emissions annually during each federal fiscal year (October 1 – September 30). [Rule 62-297.310(7)(a), F.A.C.; Construction Permit 1030060-005-AC]

##### **B.5. Compliance Test Requirements –** Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. In addition, testing of the common baghouse shall be conducted when one of the silos is being loaded and a truck is being loaded simultaneously within 90-100% of their associated permitted capacity (See Specific Condition No. B.1.). [Rules 62-4.070(3) and 62-297.310, F.A.C.; Construction Permit 1030060-005-AC]

### SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

#### B. EU No(s). 005 and 006 – Product Storage Silos and Dried Sludge Truck Loading Area with Common Baghouse

- B.6.** Compliance Test Method – Required tests shall be performed in accordance with the following reference method.

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

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

[Rules 62-204.800 and 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

#### NOTIFICATION REQUIREMENTS

- B.7.** Test Notification – The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. The notification must include the following information: the date, time, and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and the telephone number of the person conducting the test.

*{Permitting Note: The notification should also include the relevant emission unit ID No(s)., test method(s) to be used, and pollutant to be tested.}*

[Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

#### RECORDKEEPING AND REPORTING REQUIREMENTS

- B.8.** Compliance Test Reports – The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit.  
[Rule 62-297.310(8), F.A.C.]

- B.9.** Operation Recordkeeping Requirements – In order to document compliance with the requirements of Condition B.1., the permittee shall maintain daily records of the following:

- a. The dried sludge loading rate for each silo. The dried sludge loading rate for each silo is determined from the following equation:

$$P = \frac{C \times (C\%)}{R\%}$$

Where: P = Silo Sludge Loading Rate (tons/hr.)  
C = Total Wet Sludge Reed Cake to Pugmill (tons/hr.)  
C% = Percent Solids of Wet Sludge Feed Cake to Pugmill

### SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

#### **B. EU No(s). 005 and 006 – Product Storage Silos and Dried Sludge Truck Loading Area with Common Baghouse**

R% = Percent Solids of Sludge to Silos

- b. The truck loading rate.
- c. The hours of operation for the sludge storage silos and truck loading area.

Daily records shall be completed within five (5) business days and kept at the facility in a permanent form suitable for inspection by the Department or PCAQD.

[Rule 62-4070(3), F.A.C.; Construction Permit 1030060-005-AC]

#### **OPERATION AND MAINTENANCE (O & M) PLAN**

**B.10.** Operation and Maintenance (O & M) Plan for PM Control – The permittee shall maintain and implement an O & M Plan for the common baghouse to include a schedule for the maintenance and inspection of the baghouse, collection systems, and auxiliary equipment. Records of inspections, maintenance, and performance data of control devices and auxiliary equipment shall be retained at the facility for a minimum of two (2) years and shall be made available to the Compliance Authority upon request. The O & M Plan may be amended with the prior approval of the Compliance Authority. At a minimum, the O & M Plan shall include:

- a. The operating parameters of the pollution control device.
- b. Timetable for the routine maintenance of the pollution control device as specified by the manufacturer.
- c. Timetable for the routine periodic observations of the pollution control device sufficient to ensure proper operations.
- d. A list of the type and quantity of the required spare parts for the pollution control device, which are stored on the premises of the permit applicant.
- e. A record log which will indicate, at a minimum:
  - 1. When maintenance and observations were performed;
  - 2. What maintenance and observations were performed;
  - 3. Who performed said maintenance and observations; and
  - 4. Acceptable parameter ranges for each operational check.

[Rule 62-4.070(3), F.A.C. and Pinellas County Code, Section 58-128(a)]