Florida Department of Environmental Protection
Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

DRAFT PERMIT

PERMITTEE

Separation Technologies, LLC
13151 Wyandotte Road
Gibsonton, FL 33534

Authorized Representative:
Mr. Rudolph Wiechert, Regional Operations Mgr.

Air Permit No. 0170034-019-AC
Permit Expires: 03/31/2014
Site Name: Crystal River Tank Farm Annex
Minor Air Construction Permit
Project: Fly Ash Truck to Railcar Transloading Operations

This is the final air construction permit for the fly ash material transloading operations to be conducted at the Separation Technologies, LLC Crystal River Tank Farm Annex (Standard Industrial Classification No. 5093). This facility is located in Citrus County at 15760 Powerline Road in Crystal River, Florida (co-located with the Progress Energy Crystal River Power Plant). The UTM coordinates are Zone 17, 334.0 N km East, and 3204.44 km North. As noted in the Final Determination provided with these final permits, no changes or only minor changes and clarifications were made to the draft permits.

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. 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.
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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 Hillsborough County, Florida

DRAFT

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Kelley M. Boatwright Effective Date
District Air Program Administrator
Southwest District

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination, 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. Rudolph Wiechert, Separation Technologies, LLC
(rwiechert@titanamerica.com)

Ms. Katherine Katsourides, Trinity Consultants
(kkatsourides@trinityconsultants.com)

Mr. Brad James, P.E., Trinity Consultants
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Erin DeBacco, SWD Compliance Team Manager
(Erin.DiBacco@dep.state.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.

DRAFT

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(Clerk) (Date)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

This is an existing fly ash storage and transfer facility. This facility receives fly ash from the onsite Progress Energy Crystal River Power Plant or an offsite facility, stores it in four storage silos and a storage tank, and loads it out, wet or dry, to trucks. The existing facility consists of the following emissions units (EUs).

Facility ID No. 0170034

EU ID No.	Emission Unit Description
001	Fly Ash Storage Silo M-1
003	Fly Ash Storage Silo M-2
004	Fly Ash Mass Storage Tank M-3
005	Fly Ash Storage Silo M-4
006	Fly Ash Storage Silo M-5
007	Loading Fly Ash from Storage Silos to Trucks
008	Vacuum/Pressure Reclaim System

Project Description and Proposed Emission Unit

This project is the addition of transloading of fly ash from transport trucks to railcars to the current operations at this facility. In the transloading operations, a pneumatic tanker truck will connect to the bottom of the railcar and the pneumatic tanker truck blower will be utilized to convey the flyash from the truck to the railcar. The railcar will be vented to a portable baghouse filter dust collector will be located alongside the railcar during the transloading operations for control of particulate matter emissions. Separation Technologies is proposing six potential locations on-site where truck to railcar transloading operations can take place, but transloading will be limited to one location only at any specific time. The six transloading operation locations range from areas near the fly ash tank farm, to other areas further away on the main rail line or at a more distant rail siding. This project will add the following emissions unit (EU).

EU ID No.	Emission Unit Description
009	Fly Ash Truck to Railcar Transloading Operations

NOTE: *Please reference the Permit No., Facility ID, and Emission Unit ID in all correspondence, test report submittals, applications, etc.*

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 source for the pollutant particulate matter less than 10 micrometers (PM_{10}). The restriction on the amount of material processed contained in this permit, and the operation of the particulate matter emission control equipment (i.e., baghouse), will ensure that the facility's PM_{10} emissions will be below the threshold for a Title V source.

PERMIT HISTORY/AFFECTED PERMITS

Reference current facility Air Operation Permit No. 0170034-014-AO.

ADMINISTRATIVE REQUIREMENTS

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

Florida Department of Environmental Protection
Southwest District Office
Air Resource Management Section
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813-632-7600

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

2. Compliance Authority - The compliance authority for this project is the Florida Department of Environmental Protection (Department), Southwest District Office's Compliance and Enforcement Section - Attention: AIR Section (see above mailing address and phone number). All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the above address.

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; and
d. Appendix D. Common Testing Requirements.

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 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. Application for Non-Title V Air Operation Permit Revision - This permit authorizes construction of the permitted emissions unit and initial operation to determine compliance with Department rules. A Non-Title V air operation permit revision to incorporate the permitted emissions unit is required for continued operation of the permitted emissions unit. The permittee shall apply for a Non-Title V air operation permit revision at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation of the permitted emission unit. Commencing operation means setting into operation of any emissions unit for any purpose. To apply for a Non-Title V air 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. a copy of the initial visible emissions (VE) compliance test report required by Specific Condition Nos. A.5. and A.12., if not previously submitted;

d. copies of the most recent month of the monthly and daily records/logs specified in Specific Condition No. A.13.

The application shall be submitted to the Permitting Authority.
[Rules 62-4.030, 62-4.050, and 62-4.220, F.A.C.]

FACILITY-WIDE REQUIREMENTS

9. Facility-wide Control of Unconfined Emissions of Particulate Matter - All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter (PM) in accordance with the provisions in Rule 62-296.320, F.A.C. These provisions are applicable to any source, including but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. At a minimum, the following precautions shall be taken by the permittee.

a. Maintain access to a water spray truck on-site at all times for use as needed.

b. Apply crushed concrete or other appropriate aggregate to most heavily trafficked roadways.

c. Attend to upset conditions promptly.

d. Make applicable plant personnel aware of the environmental requirements of the permit.

e. Signs will be posted in appropriate areas that will limit all on-site traffic to 15 mph, or in accordance with Duke Energy standards.

f. Exercise good housekeeping practices at all times.

If operating experience indicates that these reasonable precautions are not sufficient to control unconfined emissions, the Department or its designee reserves the right to require additional measures.

(Permitting Note - Reference also Condition 9 of Section 4. Appendix C.)

[Rule 62-296.320(4)(c), F.A.C.; EPSAP construction permit application submitted 02/18/13]

A. EU No. 009 – Fly Ash Truck to Railcar Transloading Operations

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

EU ID No.	Emission Unit Description
009	Fly Ash Truck to Railcar Transloading Operations – In the transloading (transfer) operations, a pneumatic tanker truck will connect to the bottom of the railcar via a 4" truck hose. The pneumatic tanker truck blower will be utilized to convey the flyash from the truck to the railcar. The railcar will be vented to a baghouse filter dust collector for control of particulate matter emissions. In accordance with the baghouse operating instructions, the dust collector will be purged back into the railcar after each truck is finished transferring. The baghouse, a portable Rail Barge Truck Model DC1400, will be located alongside the railcar during the transloading operations. The pneumatic tanker trucks have a maximum transloading transfer rate of approximately 36 tons/hour to the railcar. Each truck's transloading time will be between 45 and 60 minutes as the transport trucks have a capacity of approximately 27.5 tons. Each railcar has a capacity of 110 tons, so it will take approximately four (4) trucks to fill a railcar. Only one truck will be transferring to the railcar at any time, and only one railcar will be loaded at a time. Separation Technologies is proposing six potential locations on-site where truck to railcar transloading operations can take place, but transloading will be limited to one location only at any specific time. The six transloading operation locations range from areas near the fly ash tank farm, to other areas further away on the main rail line or at a more distant rail siding.

PERFORMANCE RESTRICTIONS

A.1. Permitted Capacity and Process Rate - The quantity of fly ash transloaded (transferred) from trucks to railcars shall not exceed 315,360 tons per any consecutive 12-month period*. *(See Specific Condition No. A.13. for associated monthly recordkeeping requirements.)*

(Process Rate Limitation Note - The above limitation is based on a maximum truck pneumatic transfer rate of 36 tons/hour to the railcar, and operation for 8,760 hours/year with only one truck to railcar transloading operation being conducted at the facility at any one time.)*

[Rule 62-210.200 (definition of Potential to Emit), F.A.C.; construction permit application submitted 02/18/13]

A.2. Restricted Operation - The hours of operation of this emissions unit are not limited (i.e., permitted for 8760 hours per year). Operation is limited to transloading fly ash at one location only at any specific time, and transloading fly ash from only one truck at a time at that location (i.e., only one truck shall be transloading flyash into railcars at the facility at any specific time). *(See Specific Condition No. A.13. for associated daily recordkeeping requirements.)* [Rules 62-4.070(3) and 62-210.200 (definition of Potential to Emit), F.A.C.; construction permit application submitted 02/18/13]

A.3. Circumvention of Emission Control Equipment – The baghouse filter railcar dust collection system shall be in service and operating properly during all periods of fly ash truck to railcar transloading (transfer) operations.
[Rule 62-210.650 (definition of Circumvention), F.A.C.]

EMISSIONS STANDARDS

A.4. Visible Emissions (VE) Limitation – To ensure the baghouse filter railcar dust collector is properly maintained and operated, visible emissions from the baghouse exhaust vent shall not exceed 5% opacity.
[Rule 62-210.650 (definition of Circumvention), F.A.C.]

COMPLIANCE TESTING REQUIREMENTS

A.5. Initial Visible Emissions (VE) Compliance Tests - The emissions unit shall be tested for visible emissions to demonstrate initial compliance with the visible emissions standard of Specific Condition No. A.4. The initial test shall be conducted no later than 60 days after initial operation transloading fly ash from a truck to a railcar. *(See Specific Condition No. A.11. for initial operation notification requirements.)*
[Rules 62-4.070(3) and 62-297.310(7)(a)1., F.A.C.]

A.6. Visible Emissions (VE) Compliance Tests After Initial Testing - During each federal fiscal year (October 1st to September 30th), the emissions unit shall be tested for visible emissions to demonstrate compliance with the visible emissions standard of Specific Condition No. A.4.
[Rule 62-297.310, F.A.C.]

A.7. 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.8. Operation During Compliance Testing - Testing of visible emissions (VE) from the fly ash truck to railcar transloading baghouse dust collector shall be conducted during truck to railcar fly ash transloading operations within 90-100% of the maximum truck pneumatic transport rate of 36 tons/hour of fly ash. The fly ash truck to railcar transloading rate (tons/hour) for the test period shall be included with the test report. Failure to document and submit the fly ash transloading rate and actual operating conditions in the test report may invalidate the test data.
[Rules 62-297.310(2) and 62-4.070(3), F.A.C.]

A.9. Compliance Test Method - Required compliance tests shall be performed in accordance with the following reference method.

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources The visible emission (opacity) test observation period shall be at least 30 minutes in duration and occur when the highest opacity emissions can reasonably be expected to occur.

The above method is described in Appendix A of 40 CFR 60 and is 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.
[Rule 62-204.800, F.A.C.; Appendix A of 40 CFR 60]

NOTIFICATION REQUIREMENTS

A.10. 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.]

A.11. Notification of Operation Commencement - The permittee shall notify the Compliance Authority in writing of the date of commencing operation of the fly ash transloading operations, no later than fifteen (15) days after that date. Commencing operation means setting into operation of any emissions unit for any purpose – in this case the first time fly ash from a truck is transloaded (transferred) to a railcar.
[Rules 62-4.070 and 62-210.200, F.A.C., (definition of Commence Operation)]

RECORDKEEPING AND REPORTING REQUIREMENTS

A.12. 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. The test report shall include the estimated truck to railcar transloading (transfer) rate (in tons/hour) during the test period.
[Rule 62-297.310(8), F.A.C.]

A.13. Recordkeeping Requirements - In order to demonstrate compliance with the limitations specified in Specific Condition Nos. A.1., A.2., and A.3. monthly and daily fly ash transloading operations logs (paper or electronic logs) shall be maintained that contain at the least the following information:

Monthly Fly Ash Process Records:

The following shall be recorded monthly:

a. facility name and ID number (i.e., Separation Technologies, Facility ID 0170034); Emission Unit ID No. and description (i.e., EU No. 009, Fly Ash Truck to Railcar Transloading Operations);

b. month and year of the record;

c. total amount of fly ash transloaded (transferred) from truck to railcar during the month (tons); and

d. total amount of fly ash transloaded from truck to railcar during the most recent consecutive 12-month period (tons/consecutive 12-months).

Daily Fly Ash Transloading Log*:

The following shall be recorded for each day dry fly ash is loaded into trucks from the storage silos:

a. facility name and ID number (i.e., Separation Technologies, Facility ID 0170034); Emission Unit ID No. and description (i.e., EU No. 009, Fly Ash Truck to Railcar Transloading Operations);

b. date (month/day/year) of the record;

c. location where fly ash truck to railcar transloading operations are being done (identify location: Primary; Secondary, Tertiary; #4, #5, #6);

d. time period(s) fly ash transloading was being done;

e. number of trucks transloaded to railcars during the above time period(s); and

f. confirmation that the railcar baghouse filter dust control system was in place and operating properly during the transloading operations.

(Permitting Note – The purpose of the above daily log is to document and provide reasonable assurance that the transloading operations are being limited to only location at a time, and only one railcar at a time at that location, as required in Specific Condition No. A.2.)*

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

A.14. Record Retention – All monthly records shall be completed by the end of the following month. All daily records shall be completed within five (5) business days. All records, supporting documentation, monitoring data, and all compliance test information required by these permits shall be maintained on site for a minimum of three (3) years and shall be made available to the Department upon request.
[Rules 62-4.160(14)(b) and 62-4.070(3), F.A.C.]