

TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION
FOR

Separation Technologies, LLC

Hillsborough County

Construction/Operating Permit

Application Number

0571326-005-AC

Environmental Protection Commission of

Hillsborough County

Tampa, FL

August 8, 2014

I. Project Description

A. Applicant:

George Pantazopoulos
Vice President Cement Pozzolans and Aggregates
Titan Florida, LLC
455 Fairway Drive #200
Deerfield Beach, FL 33441

B. Engineer:

Robert A. Velasco, P.E.
Tampa Electric Company
702 N. Franklin St.
Tampa, FL 33602

C. Project and Location:

This permit: (1) increases the PM outlet grain loading limit on the baghouses; (2) increases the facility wide PM PTE; (3) increases the facility NOx emissions; and (4) modifies the testing requirements for the emission units. The project has been assigned the NEDS Source Classification Code Nos.:

3-05-102-98 – Industrial Processes, Bulk Material Storage
3-05-105-98 - Industrial Processes, Bulk Material Loading
3-05-900-03 –Industrial Processes, In-Process Fuel Use, Natural Gas

The Standard Industrial Code for the project is No. 3999, Miscellaneous Manufacturing Industries. The project is located at 13151 Wyandotte Road, Gibsonton, FL 33534. UTM Coordinates of the location are 17-361.90 E and 3075.00 N.

D. Process and Controls:

Separation Technologies (ST) removes residual carbon and ammonia from raw flyash generated at TEC Big Bend. The resultant low carbon, low ammonia, high mineral product flyash (ProAsh®) is marketed to ready-mix concrete producers as a cement substitute. The high carbon by-product material (EcoTherm) is utilized by area cement kilns as a fuel and mineral feed substitute.

The flyash processing facility consists of three systems: (1) Raw Feed Flyash Handling and Carbon Separation, (2) Ammonia Removal (Beneficiation), and (3) Product Storage and Loadout. Raw flyash is primarily received directly from TEC's coal-fired electricity-generating units through pneumatic piping, although ST is capable of receiving flyash via truck. The flyash is delivered into an enclosed feed ash storage dome controlled by a 7,305

DSCFM IAC, Model No. 56PE-BVI-196, baghouse.

The material is then transferred from the dome by two reclaim pumps, each controlled by one identical 400 DSCFM IAC, Model No. 72TB-BVI-25, baghouse, to one of two separator surge bins (Separator A and Separator B). Separator A is controlled a 2,848 DSCFM Z and Z Conveying Technology, Model No. CF 48-41.5(6)-20, baghouse. Separator B is controlled a 1,574 DSCFM Z and Z Conveying Technology, Model No. CF 48-41.5(6)-20, baghouse. The flyash is then passed through the respective separator line.

Residual carbon in the raw flyash is removed using ST's patented electrostatic separation technology. ST's technology utilizes triboelectric charging to partition mineral-rich and carbon-rich flyash fractions by adding the material to a narrow gap between high voltage electrodes in the ST separator device. Applying a voltage to the electrodes creates a strong electric field gradient that causes the mineral particles to move toward the positive electrode and the carbon particles to move toward the negative electrode. A high speed belt is used to transport the flyash through the electrode gap, depositing the mineral-rich and carbon-rich fractions into their respective product hoppers at each end of the ST device.

The carbon-rich ash is pneumatically transferred directly to the high-carbon storage/loadout silo, or is directed to a third separator line (Separator C) for additional separation in order to produce a higher content carbon-rich ash. Separator C is controlled by a 1,794 DSCFM Z and Z Conveying Technology, Model No. CF 48-41.5(6)-20, baghouse. The mineral-rich ash can be pneumatically transferred directly to the high-mineral storage/loadout silo for shipment off-site if the flyash has not been ammoniated at the power plant. However, the majority of the flyash received has been ammoniated so the mineral-rich ash contains residual absorbed ammonia and ammonia salts. The mineral-rich ash is directed to the surge bin at the Ammonia Removal System. Emissions from the processing of flyash in the separator lines are vented to a 6,000 DSCFM Z and Z Conveying Technology, Model No. CF 100-08(6)-20, baghouse.

The beneficiation process removes residual adsorbed ammonia and ammonium salts from the flyash by mixing the mineral-rich ProAsh® with a small amount of water and an alkaline mineral additive (lime), which is delivered by truck and pneumatically pumped into a silo, to release solid-phase ammonia as ammonia gas. The flyash feed bin is controlled by a 2,530 DSCFM Z and Z Conveying Technology, Model No. CF 30-41.5(6)-20, baghouse. The lime silo is controlled by a 400 DSCFM Filter Technology, Model No. BV-250, baghouse. The ammonia-free flyash is then dried in a 12 MMBtu/hr natural gas-fired flash dryer and pneumatically pumped to the ProAsh® storage/loadout silo. Ammonia gas released in the mixer is vented through a mixer purge filter and then to a Catalytic Products International two stage catalytic oxidation (SCO) system to oxidize the ammonia gas into nitrogen.

The first stage in the ammonia catalytic oxidation system is a low temperature ammonia oxidation stage with a catalyst and a 3 MMBtu/hr burner where the ammonia is oxidized into N₂ and NO_x. The type of catalyst used is proprietary. The second stage is a SCR reduction stage where the remaining ammonia reacts with NO_x to form N₂. The initial air flow into the

ammonia catalytic oxidation system is split so that approximately 25% of the ammonia gas bypasses the oxidation stage and is sparged directly into the SCR stage. The air stream is split to ensure that enough ammonia gas is available to react with the NO_x that is emitted in the oxidation stage to form N₂. The exhaust from the SCO system is passed through the dryer and the heat generated from the ammonia catalytic oxidation system is used to help offset natural gas usage in the dryer. The dryer is controlled by a 20,000 DSCFM MAC Equipment, Model No. 144MCF572-364, baghouse. The maximum combined fuel usage of the ammonia catalytic oxidation system and the dryer is 131 mmscf.

The final system at the ST facility includes one 10,000 ton concrete storage silo (Silo No. 4) to store the mineral-rich flyash and one concrete 6,500 ton storage silo (Silo No. 5) to store the carbon-rich flyash. Silo No. 4 is controlled by a 2,120 DSCFM Z and Z Conveying Technology, Model No. CF 36-41.5(6)-20, baghouse. Silo No. 5 is controlled by a 1,593 DSCFM Z and Z Conveying Technology, Model No. CF 36-41.5(6)-20, baghouse.

There is one truck loadout station per silo. Trucks pull into a partially enclosed area located at the base of each silo. The mineral-rich ProAsh® is loaded into enclosed trucks using a telescopic loading spout. The spout connects to the hatch opening on the truck and is controlled by a 1,600 DSCFM DCL, Inc., Model No. CFM 330-114, baghouse. The carbon-rich flyash is loaded into open bed trucks using either a truck loading chute or a telescopic loading spout. The loading spout is controlled by a 1,600 DSCFM DCL, Inc., Model No. CFM 330-114, baghouse. Once loading is finished, water is sprayed on the carbon-rich flyash to help minimize emissions during transportation.

As requested by the permittee, the potential particulate matter (PM) emissions for this project are based on the baghouse airflow rates and an emissions limiting standard of 0.03 gr/dscf standard pursuant to Rules 62-296.711 and 62-296.712, F.A.C. Based on this, the total facility-wide PM PTE is 57.1 tons/yr. The increase in potential PM emissions results in the facility being subject to Rule 62-296.700 - Reasonably Available Control Technology (RACT) Particulate Matter; Rule 62-296.711, F.A.C. - Materials Handling, Sizing, Screening, Crushing and Grinding Operations; and Rule 62-296.712, F.A.C. - Miscellaneous Manufacturing Process Operations.

As requested by the permittee, the potential NO_x emissions from the Ammonia Removal System are limited to 71 tons/year. This is based on a maximum design fan flow rate of 7,500 scfm, a maximum NO_x concentration of 300 ppm, and 8,760 hours/year of operation. The NO_x CEM will be used to demonstrate compliance with the 300 ppm limit, as an annual monthly average.

In the permit application, the permittee requested to remove the airflow rates of the baghouses from the permit conditions. However, pursuant to Rule 62-296.700(4)(a), F.A.C., the operating permit for each emissions unit subject to the provisions of this rule shall specify the maximum dry standard volumetric flow rate for each emission point. Therefore, the air flowrates are included in the specific conditions of this permit.

E. Application Information:

Received on: July 3, 2014

Information Requested: N/A

Application Complete: July 3, 2014

II. Rule Applicability

This project is subject to the pre-construction review requirements of Chapter 403, Florida Statutes, Chapters, 62-204, 62-210, 62-212, 62-296, and 62-297, Florida Administrative Code (F.A.C.) and Chapter 1-3 of the Rules of the Environmental Protection Commission of Hillsborough County.

This project is not subject to the requirements of Rule 62-212.400, Prevention of Significant Deterioration, F.A.C. or Rule 62-212.500, New Source Review for Non-attainment Areas, F.A.C., since the facility is a synthetic minor facility by state definition.

This project is subject to the requirements of Rule 62-212.300, General Preconstruction Review Requirements, since the project is not exempt from the permit requirements in Rule 62-210.300, F.A.C.

This project is subject to the requirements of Rule 62-296.320, General Pollutant Emission Limiting Standards, F.A.C., since the project is a source of particulate matter and a potential source of odor.

This project is not subject to the requirements of Rule 62-296.401 through 62-296.470, Specific Emission Limiting and Performance Standards, F.A.C., since there is not an applicable category for this source.

This project is not subject to the requirements of Rule 62-296.500, Reasonably Available Control Technology for VOCs, F.A.C., since there is not an applicable source category for this source.

This project is not subject to the requirements of Rule 62-296.600, Reasonably Available Control Technology for lead, F.A.C., since there is not an applicable category for this source.

This project is subject to the requirements of Rule 62-296.700, Reasonably Available Control Technology for Particulate Matter, F.A.C., since there are applicable source category for this source, specifically, Rule 62-296.711, F.A.C. - Materials Handling, Sizing, Screening, Crushing and Grinding Operations and Rule 62-296.712, F.A.C. - Miscellaneous Manufacturing Process Operations, since facility's potential particulate matter emissions are greater than 5 pounds per hour and 15 tons per year.

This project is not subject to the requirements of Rule 62-204.800, Federal Regulations Adopted by Reference, F.A.C., since there is no applicable source specific category in this rule.

This project is subject to the requirements of Chapter 84-446, Laws of Florida and Chapter 1-3, Rules of the Environmental Protection Commission of Hillsborough County.

III. Summary of Emissions

Particulate Matter Emissions

Emission Unit (EU)	Emission Point	Potential Emissions (TPY)	Actual Emissions (TPY)	Increase in Emissions (TPY)	Allowable Emissions
EU 001: Raw Feed Flyash Handling and Carbon Separation System	a: Feed Flyash Storage Dome Bin Vent	8.2	0.3	7.9	0.03 gr/dscf and 5% opacity
	b: Dome Reclaim Pump A Vent	0.5	0.3	0.2	0.03 gr/dscf and 5% opacity
	c: Dome Reclaim Pump B Vent	0.5	0.3	0.2	0.03 gr/dscf and 5% opacity
	d: Separator A Tank Vent Filter	3.2	0.3	2.9	0.03 gr/dscf and 5% opacity
	e: Separator B Tank Vent Filter	1.8	0.3	1.5	0.03 gr/dscf and 5% opacity
	f: Separator C Receiver Filter	2.0	0.3	1.7	0.03 gr/dscf and 5% opacity
	g: Separator Dust Collector Vent	6.8	0.3	6.5	0.03 gr/dscf and 5% opacity
	h: Clean-up Vacuum Vent	0.5	0.3	0.2	0.03 gr/dscf and 5% opacity
EU Total		23.5	2.4	21.1	
EU 002: Ammonia Removal and Dryer System	n: Flyash Surge Bin Vent	0.5	0.7	-	0.03 gr/dscf and 5% opacity
	o: Lime Storage Bin Vent	22.5	0.7	21.8	0.03 gr/dscf and 5% opacity
	p: Gas-fired Dryer Stack (includes Flyash Mixing System and SCO)	2.4	0.7	1.7	0.03 gr/dscf and 5% opacity
EU Total		25.8	2.1	23.7	

Emission Unit (EU)	Emission Point	Potential Emissions (TPY)	Actual Emissions (TPY)	Increase in Emissions (TPY)	Allowable Emissions
EU 003: Product Storage and Loadout	i: Silo 4 Vent	2.4	0.3	2.1	0.03 gr/dscf and 5% opacity
	j: Silo 5 Vent	1.8	0.3	1.5	0.03 gr/dscf and 5% opacity
	k: Silo 4 Primary Loadout Vent	1.8	0.3	1.5	0.03 gr/dscf and 5% opacity
	l: Silo 5 Primary Loadout Vent	1.8	0.3	1.5	0.03 gr/dscf and 5% opacity
EU Total		7.8	1.2	6.6	
Facility-Wide Total		57.1	5.7	51.4	

- Actual emissions are based on the average of 2012 and 2013 AOR data. The actual emissions for each emission point were calculated by dividing the actual emissions reported for each emission unit by the number of emission points in each emission unit.
- Potential emissions are based on the airflow rate of the baghouse, 0.03 gr/dscf emission limitation, and 8,760 hours of operation per year.

EU No. 002 – NO_x and SO₂ Emissions

Potential NO _x (TPY)	Actual NO _x (TPY)	Increase in NO _x (TPY)	Potential SO ₂ (TPY)	Actual SO ₂ (TPY)	Increase in SO ₂ (TPY)
71.0	3.8	67.2	0.04	0.009	0.03

- Actual emissions are based on the average of 2012 and 2013 AOR data.
- Potential NO_x emissions are based on an emission factor of 1.194 E-07 lb/scf-ppm from the NO_x stack test performed in April 2014, 7,500 scfm stack flowrate, a maximum CEM reading of 300 ppm, and 8,760 hours/year of operation.
- Potential SO₂ Emissions are based on emission factors from AP 42 5th Edition Chapter 1.4. and a maximum natural gas usage of 131 million standard cubic feet per year.

EU No. 002 – CO and VOC Emissions

Potential CO (TPY)	Actual CO (TPY)	Increase in CO (TPY)	Potential VOC (TPY)	Actual VOC (TPY)	Increase in VOC (TPY)
5.5	1.2	4.3	0.4	0.08	0.3

- Actual emissions are based on the average of 2012 and 2013 AOR data.

- Potential Emissions are based on emission factors from AP 42 5th Edition Chapter 1.4. and a maximum natural gas usage of 131 million standard cubic feet per year.

Inventory of Title III pollutants is estimated to be less than 10 TPY individually and less than 25 TPY collectively.

IV. Conclusions:

The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C., and Chapter 1-3, Rules of the Commission.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

V. Proposed Agency Action:

Pursuant to Section 403.087, Florida Statutes and Rule 62-4.070, Florida Administrative Code the Environmental Protection Commission of Hillsborough County hereby gives notice of its intent to issue a permit to construct the aforementioned air pollution source in accordance with the draft permit and its conditions as stipulated (see attached).

CERTIFIED MAIL

In the Matter of an
Application for Permit by:

George Pantazopoulos
Vice President Cement Pozzolans and Aggregates
Titan Florida, LLC
455 Fairway Drive #200
Deerfield Beach, FL 33441

File No.: 0571326-005-AC
County: Hillsborough

INTENT TO ISSUE

The Environmental Protection Commission of Hillsborough County (EPC), as delegated by the Florida Department of Environmental Protection (DEP) gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the application specified above, for the reasons stated below.

The applicant, Separation Technologies, LLC, applied on July 3, 2014, to the EPC for an air construction permit to revise the potential PM and NO_x emissions and reduce the testing frequency of the emission units at their flyash beneficiation facility. In addition, this permit incorporates the approved alternate sampling procedure, ASP Request 14-K-AP, which authorizes the use of EPA Method 320 to determine total ammonia concentrations at the inlet and outlet of the ammonia catalytic oxidation system.

The EPC has permitting jurisdiction under Chapter 403 Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4 and 62-210. The project is not exempt from permitting procedures. The EPC has determined that an air pollution construction permit is required to commence or continue operations at the described facility.

The EPC intends to issue this permit based on the belief that reasonable assurances have been provided to indicate that operation of the source will comply with the appropriate provisions of Florida Administrative Code (F.A.C.) Chapters 62-204 through 62-297 and 62-4.

Pursuant to Section 403.815 and 403.0872, F.S. and Rules 62-103.150 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue

Permit. The notice shall be published one time as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the EPC at the address or telephone number listed below. The applicant shall provide proof of publication to the EPC, Air Permitting Section, at 3629 Queen Palm Dr., Tampa, Florida 33619 (Phone 813-627-2600 - FAX 813-627-2660) within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit pursuant to Rule 62-103.150(6), F.A.C.

The EPC will issue the final permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Section 120.569 and 120.57 F.S. before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Legal Department of the EPC at 3629 Queen Palm Dr., Tampa, Florida 33619, Phone 813-627-2600, Fax 813-627-2602. Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 (fourteen) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), however, any person who asked the EPC for notice of agency action may file a petition within 14 (fourteen) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. 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 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 EPC'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, and telephone number of the petitioner and the name, address, and telephone number of each petitioner's representative, if any, which shall be the address for service purposes during the course of the proceedings; and an explanation of how the petitioner's substantial interests will be affected by the EPC's determination;
- (c) A statement of how and when the petitioner received notice of the EPC action;
- (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 EPC's proposed action;

(f) A statement of specific rules or statutes that the petitioner contends requires reversal or modification of the EPC'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 petitioner wishes the EPC to take with respect to the EPC's proposed action.

A petition that does not dispute the material facts upon which the EPC'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 EPC's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the EPC on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under section 120.573, F.S. is not available in this proceeding.

This action is final and effective on the date filed with the Clerk of the EPC unless a petition is filed in accordance with above. Upon the timely filing of a petition, this order will not be effective until further order of the EPC.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, FL 32399-3000. The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner,
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any,
- (c) Each rule or portion of a rule from which a variance or waiver is requested,
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above,
- (e) The type of action requested,
- (f) The specific facts that would justify a variance or waiver for the petitioner,
- (g) The reason by the variance or waiver would serve the purposes of the underlying statute (implemented by the rule), and
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of the those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of United States Environmental Protection Agency and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Any person listed below may request to obtain additional information, a copy of the application (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), all relevant supporting materials, and all other materials available to the EPC that are relevant to the permit decision. Interested persons may contact Diana M. Lee, P.E., at the above address or call (813) 627-2600, for additional information.

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 EPC's Legal Office at 3629 Queen Palm Dr., Tampa, Florida 33619 and 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 thirty days after this order is filed with the clerk of the Department.

Executed in Tampa, Florida

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

Richard D. Garrity, Ph.D.
Executive Director

cc: Florida Department of Environmental Protection, Southwest District (posting online)
Robert A. Velasco, P.E. - Tampa Electric Company (via email)
Kevin Brooks – Separation Technologies, LLC (via email)
Kelly Folsom – Titan America (via email)

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY
NOTICE OF INTENT TO ISSUE PERMIT

The Environmental Protection Commission of Hillsborough County (EPC), as delegated by the Florida Department of Environmental Protection (DEP) gives notice of its intent to issue air pollution Permit No. 0571326-005-AC to Separation Technologies, LLC, to revise the potential PM and NOx emissions and reduce the testing frequency of the emission units at their flyash beneficiation facility. Also, this permit incorporates the use of an alternative sampling procedure to determine ammonia concentrations from the oxidation system. The facility, a synthetic non-TV facility, is located at 13151 Wyandotte Road, Gibsonton, FL 33535.

A Best Available Control Technology (BACT) determination was not required.

The EPC will issue the Final permit with the conditions of the DRAFT permit unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S. before the deadline for filing a petition. The procedures for petitioning for hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Legal Department of the EPC at 3629 Queen Palm Dr., Tampa, Florida 33619, Phone 813-627-2600, Fax 813-627-2602. Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 (fourteen) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), however, any person who asked the EPC for notice of agency action may file a petition within 14 (fourteen) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. 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 will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the F.A.C.

A petition that disputes the material facts on which the EPC'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, and telephone number of the petitioner, and the name, address, and telephone number of each petitioner's representative, if any, which shall be the address for service purposes during the course of the proceedings; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
- (c) A statement of how and when petitioner received notice of the EPC action;
- (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 EPC proposed action;

(f) A statement of specific rules or statutes that the petitioner contends requires reversal or modification of the EPC'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 petitioner wishes the EPC to take with respect to the EPC's proposed action.

A petition that does not dispute the material facts upon which the EPC'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.

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

Mediation under section 120.573, F.S. is not available in this proceeding.

This action is final and effective on the date filed with the Clerk of the EPC unless a petition is filed in accordance with above. Upon the timely filing of a petition this order will not be effective until further order of the EPC.

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 EPC's Legal Office at 3629 Queen Palm Dr., Tampa, Florida 33619 and 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 thirty days after this order is filed with the clerk of the Department.

The complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Environmental Protection Commission of Hillsborough County, 3629 Queen Palm Dr., Tampa, FL 33619. The complete project file includes the proposed Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Diana M. Lee, P.E., at the above address, or call 813-627-2600, for additional information. Any written comments filed shall be available for public inspection. If written comments received result in a significant change in the proposed agency action, the EPC shall revise the proposed permit and require, if applicable, another Public Notice.

ENVIRONMENTAL PROTECTION COMMISSION OF
HILLSBOROUGH COUNTY, as Delegated by

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF PERMIT

George Pantazopoulos
Vice President Cement Pozzolans and Aggregates
Titan Florida, LLC
455 Fairway Drive #200
Deerfield Beach, FL 33441

Dear Mr. Pantazopoulos:

Enclosed is Permit Number 0571326-005-AC to revise the potential PM and NOx emissions and reduce the testing frequency of the emission units at the flyash beneficiation facility, issued pursuant to Section 403.087, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the EPC in the Legal Department at 3629 Queen Palm Dr., Tampa, Florida 33619; 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 of Appeal must be filed within 30 days from the date this Notice is filed with the clerk of the EPC.

Executed in Tampa, Florida.

Sincerely,

Richard D. Garrity, Ph.D.
Executive Director

RDG/LAW/law

Titan Florida, LLC
Deerfield Beach, FL 33441

Page Two

cc: Florida Department of Environmental Protection, Southwest District (posting online)
Robert A. Velasco, P.E. - Tampa Electric Company (via email)
Kevin Brooks – Separation Technologies, LLC (via email)
Kelly Folsom – Titan America (via email)

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on _____ to the listed persons.

FILING AND ACKNOWLEDGEMENT

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

Clerk

Date

PERMITTEE:
Separation Technologies, LLC
Big Bend Station
13151 Wyandotte Road
Gibsonton, FL 33535

PERMIT/CERTIFICATION
Permit No.: 0571326-005-AC
County: Hillsborough
Expiration Date: February 8, 2015
Project: Revise PM and NOx emissions

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 62-204, 62-210, 62-212, 62-296, 62-297, and 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the EPC and made a part hereof and specifically described as follows:

This permit: (1) increases the PM outlet grain loading limit on the baghouses; (2) increases the facility wide PM PTE; (3) increases the facility NOx emissions; and (4) modifies the testing requirements for the emission units at a flyash handling, storage, beneficiation, and loadout facility adjacent to the Tampa Electric Company (TEC) Big Bend Power Station. Separation Technologies (ST) removes residual carbon and ammonia from raw flyash generated at TEC Big Bend. The resultant low carbon, low ammonia, high mineral product flyash (ProAsh®) is marketed to ready-mix concrete producers as a cement substitute. The high carbon by-product material (EcoTherm) is utilized by area cement kilns as a fuel and mineral feed substitute.

The flyash processing facility consists of three systems: (1) Raw Feed Flyash Handling and Carbon Separation, (2) Ammonia Removal (Beneficiation), and (3) Product Storage and Loadout. Raw flyash is primarily received directly from TEC's coal-fired electrical-generating units through pneumatic piping, although ST is capable of receiving flyash via truck. The flyash is delivered into an enclosed feed ash storage dome controlled by a 7,305 DSCFM IAC, Model No. 56PE-BVI-196, baghouse.

The material is then transferred from the dome by two reclaim pumps, each controlled by an identical 400 DSCFM IAC, Model No. 72TB-BVI-25, baghouse, to one of two separator surge bins (Separator A and Separator B). Separator A is controlled a 2,848 DSCFM Z and Z Conveying Technology, Model No. CF 48-41.5(6)-20, baghouse. Separator B is controlled a 1,574 DSCFM Z and Z Conveying Technology, Model No. CF 48-41.5(6)-20, baghouse. The flyash is then passed through the respective separator line.

Residual carbon in the raw flyash is removed using ST's patented electrostatic separation technology. ST's technology utilizes triboelectric charging to partition mineral-rich and carbon-rich flyash fraction by adding the material to a narrow gap between high voltage electrodes in the ST separator device. Applying a voltage to the electrodes creates a strong electric field gradient that causes the mineral particles to move toward the positive electrode and the carbon particles to move toward the negative electrode. A high speed belt is used to transport the flyash through the electrode gap, depositing the mineral-rich and carbon-rich fractions into their respective product hoppers at each end of the ST device.

The carbon-rich ash is pneumatically transferred directly to the high-carbon storage/loadout silo, or is directed to a third separator line (Separator C) for additional separation in order to produce a higher content carbon-rich ash. Separator C is controlled by a 1,794 DSCFM Z and Z Conveying Technology, Model No. CF 48-41.5(6)-20, baghouse. The mineral-rich ash can be pneumatically transferred directly to the high-mineral storage/loadout silo for shipment off-site if the flyash has not been ammoniated at the power plant. However, the majority of the flyash received has been ammoniated so the mineral-rich ash contains residual absorbed ammonia and ammonia salts. The mineral-rich ash is directed to the surge bin at the Ammonia Removal System. Emissions from the processing of flyash in the separator lines are vented to one 6,000 DSCFM Z and Z Conveying Technology, Model No. CF 100-08(6)-20, baghouse.

The beneficiation process removes residual adsorbed ammonia and ammonium salts from the flyash by mixing the mineral-rich ProAsh® with a small amount of water and an alkaline mineral additive (lime), which is delivered by truck and pneumatically pumped into a silo, to release solid-phase ammonia as ammonia gas. The flyash feed bin is controlled by a 2,530 DSCFM Z and Z Conveying Technology, Model No. CF 30-41.5(6)-20, baghouse. The lime silo is controlled by a 400 DSCFM Filter Technology, Model No. BV-250, baghouse. The ammonia-free flyash is then dried in a 12 MMBtu/hr natural gas-fired flash dryer and pneumatically pumped to the ProAsh® storage/loadout silo. Ammonia gas released in the mixer is vented through a mixer purge filter and then to a Catalytic Products International two stage catalytic oxidation (SCO) system to oxidize the ammonia gas into nitrogen.

The first stage in the ammonia catalytic oxidation system is a low temperature ammonia oxidation stage with a catalyst and a 3 MMBtu/hr burner where the ammonia is oxidized into N_2 and NO_x . The type of catalyst used is proprietary. The second stage is a SCR reduction stage where the remaining ammonia reacts with NO_x to form N_2 . The initial air flow into the ammonia catalytic oxidation system is split so that approximately 25% of the ammonia gas bypasses the oxidation stage and is sparged directly into the SCR stage. The air stream is split to ensure that enough ammonia gas is available to react with the NO_x that is emitted in the oxidation stage to form N_2 . The exhaust from the SCO system is passed through the dryer and the heat generated from the ammonia catalytic oxidation system is used to help offset natural gas usage in the dryer. The dryer is controlled by a 20,000 DSCFM MAC Equipment, Model No. 144MCF572-364, baghouse. The maximum combined fuel usage of the ammonia catalytic oxidation system and the dryer is 131 mmscf.

The final system at the ST facility includes one 10,000 ton concrete storage silo (Silo No. 4) to store the mineral-rich flyash and one concrete 6,500 ton storage silo (Silo No. 5) to store the carbon-rich flyash. Silo No. 4 is controlled by a 2,120 DSCFM Z and Z Conveying Technology, Model No. CF 36-41.5(6)-20, baghouse. Silo No. 5 is controlled by a 1,593 DSCFM Z and Z Conveying Technology, Model No. CF 36-41.5(6)-20, baghouse.

There is one truck loadout station per silo. Trucks pull into a partially enclosed area located at the base of each silo. The mineral-rich ProAsh® is loaded into enclosed trucks using a telescopic loading spout. The spout connects to the hatch opening on the truck and is controlled by a 1,600 DSCFM DCL, Inc., Model No. CFM 330-114, baghouse. The carbon-rich flyash is loaded into open bed trucks using either a truck loading chute or a telescopic loading spout. The loading spout is controlled by a 1,600 DSCFM DCL, Inc., Model No. CFM 330-114, baghouse. Once loading is finished, water is sprayed on the carbon-rich flyash to help minimize emissions during transportation.

FACILITY INFORMATION SUMMARY:

Location: 13151 Wyandotte Road, Gibsonton, Hillsborough County, FL

UTM Coordinates: 17-361.9 East 3075.0 North

Facility ID No.: 0571326

Emission Units:

Emission Unit (EU)	Emission Point
EU 001: Raw Feed Flyash Handling and Carbon Separation System	a: Feed Flyash Storage Dome Bin Vent (FR 103)
	b: Dome Reclaim Pump A Vent (FR 103A)
	c: Dome Reclaim Pump B Vent (FR 103B)
	d: Separator A Tank Vent Filter (FR 101A)
	e: Separator B Tank Vent Filter (FR 101B)
	f: Separator C Receiver Filter (FR 101C)
	g: Separator Dust Collector Vent (FR 102)
	h: Clean-up Vacuum Vent
EU 002: Ammonia Removal and Dryer System	n: Flyash Surge Bin Vent (FR108)
	o: Lime Storage Bin Vent (FR 109)
	p: SCO and Dryer Stack (FR106)
EU 003: Product Storage and Loadout	i: Silo 4 Vent (FR 104)
	j: Silo 5 Vent (FR 105)

EU 003: Product Storage and Loadout	k: Silo 4 Primary Loadout Vent (FR 104A)
	l: Silo 5 Primary Loadout Vent (FR 105A)

References Permit Nos.: 0571326-001-AC and 0571326-002-AC

Replaces Permit No.: 0571326-003-AO

PERMITTEE:
 Separation Technologies, LLC
 SPECIFIC CONDITIONS:

PERMIT/CERTIFICATION NO.: 0571326-005-AC
 PROJECT: Revise PM and NOx emissions

1. A part of this permit is the attached General Conditions. [Rule 62-4.160, F.A.C.]
2. All applicable rules of the Environmental Protection Commission of Hillsborough County including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations. [Rule 62-4.070(7), F.A.C.]
3. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C., or any other requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]
4. The maximum allowable and potential to emit of particulate matter (PM) emissions for each of the following sources shall not exceed the following: [Rules 62-210.200 (Potential to Emit) and 62-4.070(3), F.A.C. and Permit Application Received July 3, 2014]

Emission Unit (EU)	Emission Point	Nominal Capacity (Tons/Hour)	gr/dscf	DSCFM	Tons per Twelve Consecutive Month Period
EU 001: Raw Feed Flyash Handling and Carbon Separation System	a: Feed Flyash Storage Dome Bin Vent	90	0.03	7,305	8.2
	b: Dome Reclaim Pump A Vent	90	0.03	400	0.5
	c: Dome Reclaim Pump B Vent	90	0.03	400	0.5
	d: Separator A Tank Vent Filter	90	0.03	2,848	3.2
	e: Separator B Tank Vent Filter	90	0.03	1,574	1.8
	f: Separator C Receiver Filter	90	0.03	1,794	2.0
	g: Separator Dust Collector Vent	90	0.03	6,000	6.8

PERMITTEE:
 Separation Technologies, LLC
 SPECIFIC CONDITIONS:

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 PROJECT: Revise PM and NOx emissions

Emission Unit (EU)	Emission Point	Nominal Capacity (Tons/Hour)	gr/dscf	DSCFM	Tons per Twelve Consecutive Month Period
001	h: Clean-up Vacuum Vent	NA	0.03	400	0.5
EU Total					23.5
EU 002: Ammonia Removal and Dryer System	n: Flyash Surge Bin Vent	52	0.03	2,530	2.8
	o: Lime Storage Bin Vent	Unloading pressure of 12 psi	0.03	400	0.5
	p: Gas-fired Dryer Stack (includes Flyash Mixing System and SCO)	52	0.03	20,000	22.5
EU Total					25.8
EU 003: Product Storage and Loadout	i: Silo 4 Vent	90	0.03	2,120	2.4
	j: Silo 5 Vent	90	0.03	1,593	1.8
	k: Silo 4 Primary Loadout Vent	150	0.03	1,600	1.8
	l: Silo 5 Primary Loadout Vent	150	0.03	1600	1.8
EU Total					7.8
Facility-Wide Total					57.1

5. Visible emissions from each emission unit, each emission point, and any other activity shall not exceed 5% opacity. [Rule 62-296.712(2), F.A.C. and Chapter 1-3.52, Rules of the EPC]

6. To ensure compliance with the emission limitations in Specific Condition Nos. 4 and 5, the following restrictions and terms shall apply: [Rule 62-4.070(3) and 62-210.200 (Potential to Emit), F.A.C.;

PERMITTEE:
Separation Technologies, LLC
SPECIFIC CONDITIONS:

PERMIT/CERTIFICATION NO.: 0571326-005-AC
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and Permit Nos. 0571326-001-AC and 0571326-002-AC and Permit Application Received July 3, 2014]

- A) The maximum flyash process rate for the Raw Feed Flyash Handling and Carbon Separation System shall not exceed 788,400 tons per twelve consecutive month period.
- B) The maximum flyash process rate for the Ammonia Removal System shall not exceed 455,520 tons per twelve consecutive month period.
- C) The maximum flyash process rate for the Product Storage and Loadout operation shall not exceed 788,400 tons per twelve consecutive month period.
- D) The dryer and the ammonia catalytic oxidation system shall only be fired on natural gas.
- E) All dust laden gases shall be vented to the corresponding baghouse.
- F) The operating hours are not restricted.

7. As requested by the permittee, the NOx concentration at the outlet of the catalytic oxidation (SCO) system (point p), as read from the NOx CEM, shall not exceed an annual average of 300 ppm and 71 tons per any twelve consecutive month period. [Rule 62-4.070(3), F.A.C. and Permit Application Received July 3, 2014]

8. The permittee shall properly maintain and operate, in accordance with the manufacturer's operation and maintenance plan, a NOx CEM to monitor NOx concentrations in ppm. The CEM shall be installed at the outlet of the catalytic oxidation system. [Rule 62-4.070(3), F.A.C. and Permit Application Received July 3, 2014]

9. The NOx CEM shall be installed such that representative measurements of NOx concentrations at the outlet of the catalytic oxidation system (point p) are obtained. A stack gas monitor is not required. [Rule 62-4.070(3), F.A.C. and Permit Application Received July 3, 2014]

10. The permittee shall maintain continuous monitoring devices to measure and record the pressure drop and the temperature across the ammonia catalytic oxidation system to ensure that the catalytic oxidation system is properly operated and maintained. The monitoring devices shall be maintained in good working order and in accordance with the manufacturer's manuals. [Rule 62-4.070(3) and Rule 62-297.310(5), F.A.C. and Permit Application Received July 3, 2014]

11. The baghouses/dust collectors shall have measuring devices maintained capable of monitoring the air pressure drop in inches of water across the control devices. These devices shall be maintained in good working order and in accordance with the manufacturer's manuals. [Rule 62-4.070(3), F.A.C.]

12. Annual visible emissions (VE) testing for each emission point listed in Specific Condition No. 4 shall be conducted annually, once per federal fiscal year (October 1 – September 30). The EPA Method 9 test observation period on this source shall be at least thirty (30) minutes in duration. Two copies of the test report for each emission unit shall be submitted to the Air Management Division of the Environmental Protection Commission within 45 days of testing. [Rules 62-297.310(7)(a)4., and 297.310(8)(b), F.A.C.]

13. The permittee shall test Emission Unit No. 002, Emission Point p for particulate matter (PM) at

PERMITTEE:
Separation Technologies, LLC
SPECIFIC CONDITIONS:

PERMIT/CERTIFICATION NO.: 0571326-005-AC
PROJECT: Revise PM and NOx emissions

least 120 days prior to the expiration date of the operating permit. Two copies of the test report for each emission unit shall be submitted to the Air Management Division of the Environmental Protection Commission within 45 days of testing. [Rules 62-4.070(3), 62-297.310(7)(a)3., and 62-297.310(8)(b), F.A.C.]

14. Test EU No. 002 for the following pollutants as specified below. Two copies of the test report for each emission unit shall be submitted to the Air Management Division of the Environmental Protection Commission within 45 days of testing. The test report shall include continuous monitoring data for the NOx CEM and the pressure drop, and temperature readings that are measured across the catalyst bed during the compliance test in order to establish a correlation between the NOx CEM data and the SCR temperature and pressure drop operating parameters. Failure to submit the monitor readings, pressure drop ranges, and temperature ranges may invalidate the test report. [Rules 62-4.070(3), 62-297.310(7)(a)3., and 62-297.310(8)(b), F.A.C. and Permit Application Received July 3, 2014]

- A) Certify the NOx CEM monitor using the procedures specified in 40 CFR 60, Appendix B, Performance Specification 2, Section 16 once every six months. The results shall be made available to the Environmental Protection Commission of Hillsborough County, state, or federal officials upon request.
- B) Test the catalytic oxidation system for NOx emissions at least 120 days prior to the expiration date of the operating permit.
- C) Test for ammonia emissions at the inlet and outlet of the catalytic oxidation system at least 120 days prior to the expiration date of the operating permit.

15. Testing of emissions shall be conducted with the sources operating at capacity. Capacity is defined as 90-100% of the rated capacity listed in Specific Condition No. 4. For the central vacuum system, EU No. 001, Emission Point h, capacity is defined as operating the system at normal operating conditions during testing. If it is impracticable to test at capacity, then the source may be tested at less than capacity; in this case subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than 15 fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the EPC. Failure to submit the input rates and actual operating conditions, including the pressure drops across the baghouses, may invalidate the test. [Rules 62-4.070(3) and 62-297.310, F.A.C]

16. Compliance with the testing requirements of Specific Condition Nos. 12, 13, and 14 shall be determined using Conditional Test Method 027 (CTM-027) and EPA Methods 1, 2, 3, 4, 5, 7 or 7E, 9, or 320 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 62-297, F.A.C. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Rule 62-297, F.A.C. and 40 CFR 60, Appendix A. [Rules 62-297.310 and 62-4.070(3), F.A.C. and Alternative Sampling Procedure Request 14-K-AP dated April 8, 2014, and Permit Application Received July 3, 2014]

17. The permittee shall notify the Air Compliance Section of the Environmental Protection Commission of Hillsborough County at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the contact person who will be responsible for

PERMITTEE:
Separation Technologies, LLC
SPECIFIC CONDITIONS:

PERMIT/CERTIFICATION NO.: 0571326-005-AC
PROJECT: Revise PM and NOx emissions

coordinating and having such test conducted. [Rules 62-297.310(7)(a)9., F.A.C.]

18. In order to demonstrate compliance with the limits established in Specific Condition Nos. 4 and 6, the permittee shall maintain records for the most recent three (3) year period. The records shall be made available to the Environmental Protection Commission of Hillsborough County, state and federal officials on request. The records shall include, but are not limited to, the following: [Rules 62-4.070(3) and 62-4.160(14), F.A.C. and Permit Application Received July 3, 2014]

- A) Amount of flyash processed monthly through the Raw Feed Flyash Handling and Carbon Separation System.
- B) Amount of flyash processed monthly through the Ammonia Removal System.
- C) Amount of flyash transferred monthly through the Product Storage and Loadout.
- D) Monthly NOx emissions from the catalytic oxidizer system
- E) Twelve month rolling totals of A), B), C), and D) above.
- F) Records of inspections, maintenance, and performance parameters including a date and time of inspection and/or maintenance performed for each control equipment.
- G) Weekly pressure drop and temperature readings of the SCO system.
- H) The owner or operator shall maintain records of the shipment of the high carbon (high LOI) flyash product and where possible indicate the ultimate user.
- I) The results of each semi-annual CEMs certification shall be maintained onsite for at least five years.

19. The permittee shall not cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320, F.A.C.]

20. The use of property, facilities, equipment, processes, products, or compounds, or the commission of paint overspraying or any other act, that causes or materially contributes to a public nuisance is prohibited, pursuant to the Hillsborough County Environmental Protection Act, Section 16, Chapter 84-446, Laws of Florida, as Amended.

21. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision 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, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. Reasonable precautions shall include, but not limited to, the following: [Rule 62-296.320(4)(c), F.A.C.]

- A) Paving or maintenance of roads, parking area, and yards.
- B) Application of water when necessary to control emissions.
- C) Removal of particulate matter from roads and other paved areas under control of the owner or operator to prevent re-entrainment, and from building or work to prevent particulates from becoming airborne.
- D) Posting of vehicle speed limits, if necessary.

PERMITTEE:
Separation Technologies, LLC
SPECIFIC CONDITIONS:

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22. The permittee shall provide timely notification to the Environmental Protection Commission of Hillsborough County prior to implementing any changes that may result in a modification to this permit pursuant to Rule 62-210.200, F.A.C., Modification. The changes do not include normal maintenance, but may include, and are not limited to the following, and may also require prior authorization before implementation: [Rule 62-210.300 and 62-4.070(3), F.A.C.]

- A) Alteration or replacement of any equipment or major component of such equipment listed in the Process Description of this permit.
- B) Installation or addition of any equipment which is a source of air pollution.
- C) The use of materials or fuels other than those allowed by this permit.

23. When the Environmental Protection Commission of Hillsborough County (EPC) after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in Rules 62-204, 62-210, 62-212, 62-296, or 62-297, F.A.C., or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the source to conduct compliance tests which identify the nature and quantity of pollutant emissions from the source and to provide a report on the results of said tests to the EPC. [Rule 62-297.310(7)(b), F.A.C.]

24. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the EPCHC for longer duration. [Rule 62-210.700(1), F.A.C.]

25. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

26. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]

27. If the permittee wishes to transfer this permit to another owner, an "Application for Transfer of Permit" (DEP Form 62-210.900(7)) shall be submitted, in duplicate, to the Environmental Protection Commission of Hillsborough County within 30 days after the sale or legal transfer of the permitted facility. [Rule 62-4.120, F.A.C.]

28. Submit to the Environmental Protection Commission of Hillsborough County each calendar year on or before April 1, completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility", for the preceding calendar year. [Rule 62-210.370(3), F.A.C.]

29. Issuance of this operating permit does not preclude the Department or EPC from re-evaluating the status of this facility as a "support facility" for Tampa Electric Company's (TEC) Big Bend Power Station

PERMITTEE:
Separation Technologies, LLC
SPECIFIC CONDITIONS:

PERMIT/CERTIFICATION NO.: 0571326-005-AC
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and evaluating the facility as part of that Title V source. Promulgation of a federal NESHAP standard affecting this operation may require a permit evaluation and/or revisions of ST and TEC's operating permits. [Rule 62-210.200(Facility) and (Major Stationary Source), and 62-4.070(3), F.A.C. and Permit No. 0571326-003-AC]

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

Richard D. Garrity, Ph.D.
Executive Director