

FINAL DETERMINATION

FOR

Titan America, LLC

Hillsborough County

Air Construction Permit

Application Number

0571290-009-AC

Environmental Protection Commission of

Hillsborough County

Tampa, FL

August 6, 2013

FINAL DETERMINATION

The Environmental Protection Commission of Hillsborough County mailed a public notice package on May 30, 2013 that included an Intent to Issue Air Construction Permit No. 0571290-009-AC to Titan America, LLC. The facility is located at 4219 Maritime Blvd., Tampa, Hillsborough County, FL 33605. The air construction permit authorizes construction of a permanent aggregate conveying system and an increase in the aggregate throughput. In addition, this permit changes the status of the facility from a Title V source to a Synthetic non-Title V source of air pollution by removing the diesel-fired stationary compression ignition internal combustion engines.

The Public Notice of Intent to Issue was published in The Times, an Edition of the Tampa Bay Times on July 21, 2013.

COMMENTS/CHANGES

No comments were received from the applicant or the public.

CONCLUSION

The final action of the Environmental Protection Commission of Hillsborough County is to issue the permit as drafted.

ENVIRONMENTAL PROTECTION COMMISSION OF
HILLSBOROUGH COUNTY, as Delegated by
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF PERMIT

Cindy Burns
Director, Environmental and Property Development
Titan America, LLC
455 Fairway Dr.
Deerfield Beach, FL 33441

Dear Ms. Burns:

Enclosed is Permit Number 0571290-009-AC to change the status of the facility from a Title V source to a Synthetic non-Title V source of air pollution by removing the diesel-fired stationary compression ignition internal combustion engines. Also, this permit authorizes the construction of a permanent aggregate conveying system and an increase in the aggregate throughput, 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 Drive, Tampa, FL 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

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

Richard D. Garrity, Ph.D.
Executive Director

RDG/LAW/law

Titan America, LLC
Deerfield Beach, FL 33441

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cc: Florida Department of Environmental Protection (via email)
Brad James, P.E. – Trinity Consultants (via email)

CERTIFICATE OF SERVICE

The undersigned duly designated clerk hereby certifies that this INTENT TO ISSUE 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:
Titan America, LLC
4219 Maritime Blvd.
Tampa, FL 33605

PERMIT/CERTIFICATION
Permit No.: 0571290-009-AC
County: Hillsborough
Expiration Date: August 30, 2014
Project: Aggregate Handling Modification and
Initial Non-Title V Construction Permit

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 project authorizes the following at a concrete raw materials and aggregate handling facility:

1. Increase the aggregate handling throughput from 600,000 tons/year to 1,200,000 tons/year.
2. Increase the aggregate ship unloading rate from 1,500 tons/hour to 2,500 tons/hour
3. Install a permanent conveying system for the aggregate handling operation with eight transfer points.
4. Increase the hours of operation for EU Nos. 011 and 012 from 3,460 hours/year to 8,760 hours/year.
5. Establish the facility as a synthetic Non-TV Source by removing the following engines from the permit. The facility will no longer operate the following engines.
 - i. Five (5) 440 HP diesel fuel fired air compressors (EU No. 008)
 - ii. One 575 HP diesel fuel fired air compressor (EU No. 009)
 - iii. One 1280 HP diesel fuel fired air compressor (EU No. 010)
 - iv. One 475 HP diesel fuel fired air compressor (EU No. 013)
 - v. Two (2) 324 HP diesel fuel fired air compressor (EU No. 024)

The ship unloading equipment and the aggregate conveying system will be powered by electricity provided by TECO. Therefore, the facility will no longer operate the above engines. The removal of the engines from the permit results in a change in the facility status. The facility will now be classified as a synthetic Non-TV source.

The facility receives concrete raw materials by ship, truck, and railcar. Concrete raw materials is defined as Portland cement Types I, II, III, IV, V, white cement, masonry cement, flyash, slag cement, natural and synthetic gypsum, lime, cement kiln dust, natural pozzolana, and artificially produced pozzolana materials. During truck and railcar unloading, concrete raw materials are pneumatically transferred using the railcar unloading spout and/or one truck unloading spout to either the filter/receiver, which directs material to the four main silos and/or the two interstitial silos, or directly to the two interstitial silos. The unloading spouts are located on the south side of Silo No. 4. Material is pneumatically unloaded using air from either the truck and railcar's onboard pumps or electrical powered compressors located in the silo structure. When material is directed to the filter/receiver, PM emissions are controlled by a 25,000 DSCFM F.L. Schmidt, Model No. 398FR12(6), jet pulse baghouse. When material is directed to the two interstitial silos, PM emissions are controlled by each silo's 1,790 DSCFM F.L. Schmidt Airtech, Model No. 48DS8FM, jet pulse baghouse.

Ships are unloaded using a barge mounted ship unloading system which consists of a screw auger, a screw conveyor, a surge vessel, and a pneumatic transfer operation system utilizing four charging vessels. The vertical screw auger is used to remove the concrete raw materials from the shiphold. At the top of the vertical screw auger, the concrete raw materials are transferred to a horizontal screw conveyor and then into the surge vessel. The screw auger and screw conveyor have a maximum concrete raw materials unloading capacity of 440 tons per hour (TPH). From the surge vessel, the concrete raw materials are pneumatically loaded into one of four charging vessels. Compressed air is used to pressurize the charging vessels. Once pressurized, the concrete raw materials are pneumatically transferred to the filter/receiver which directs material to the four main silos and/or the two interstitial silos. The surge vessel(s) to the silo(s) transfer operation has a maximum transfer rate of 881 tons/hour. If the material is directed to the filter/receiver, PM emissions are controlled by the 25,000 DSCFM jet pulse baghouse described above. If the material is directed to the two interstitial silos, PM emissions are controlled by each silo's 1,790 DSCFM jet pulse baghouse described above. Particulate matter (PM) emissions from the loading of the surge vessel by the screw conveyor system and from the pneumatic loading of the charging vessels are controlled using two 1,400 DSCFM DCE, Model No. DLM V20/10F5, jet pulse baghouses. The ship unloading and transfer system will be powered by electricity.

Concrete raw materials are loaded into trucks and railcars using two loading stations. Loading Station No. 1 is used to load trucks. Loading Station No. 2 is used to load trucks and railcars. The maximum loading rate of each station is 300 TPH. Emissions from the Truck Loading Station No. 1 are controlled by a 2,000 DSCFM DCL, Model No. CFM 330-1F14, jet pulse baghouse. Emissions from the Truck and Railcar Loading Station No. 2 are controlled by a 2,000 DSCFM DCL, Model No. CFM 330-1F14, jet pulse baghouse.

In addition, the facility operates a ship loading operation at Hooker's Point Berth 219 or any other berth controlled by the Tampa Port Authority. Ships can be loaded by using either of three different types of loading methods. Concrete raw materials can be loaded directly into ships from the facility's silos, which is referred to as direct exporting. Also, concrete raw materials can be loaded into ships by using trucks and/or railcars that are loaded onsite from the silos. A third loading alternative would be loading a ship with trucks that bring concrete raw materials from other facilities.

A maximum of twelve trucks and/or railcars at a time can load concrete raw materials directly into a ship using the trucks and/or railcars' onboard pneumatic pumps. The trucks and/or railcars pneumatically load material into ships at a maximum rate of 300 tons/hour and 750,000 tons per twelve consecutive month period.

Particulate matter emissions from the ship loading operation are controlled by either a portable baghouse, which may be rented from a third party company as needed, or by a shipboard baghouse with a maximum flowrate of 48,179 DSCFM. Either the portable baghouse or the shipboard baghouse shall be used during ship loading. The portable baghouse is powered by a 99 HP or less diesel fired engine. The make and model number of the portable and shipboard baghouses may change as long as the specifications in the permit are met.

Concrete raw materials are also loaded directly into ships using a pneumatic system referred to as direct exporting. Concrete raw materials from the storage silos are gravity fed to the railcar loadout spout and then into an enclosed receiving hopper. The hopper serves as a funnel to transition the concrete raw materials from the loadout spout to the pump. An electricity powered pump and three electricity powered air compressors pneumatically transfer the concrete raw materials to the 12" ship loading lines through a flexible hose and a pipe extension. The concrete raw materials are then pneumatically transferred into a ship through the 12" ship loading lines. The Truck and Railcar Loading Station No. 2 baghouse controls particulate matter emissions from the direct export operation. In addition, the ship's dust collector or the portable baghouse controls particulate matter emissions from the ship loading operation.

The facility operations also include an aggregate handling operation, which involves receiving, storing and loading out aggregate materials. Aggregate (identified as recycled concrete, limestone, granite, and mineral aggregate deposits, which includes but is not limited to sand, gravel, and stone) is received from a ship off-loading conveyor at a maximum rate of 2,500 ton/hr and dropped into a dockside hopper. As part of this new modification, Titan will install a permanent conveying system to handle the aggregate material. This new permanent conveying system will replace the use of trucks, which are currently used to transfer the material from the dockside hopper to the storage piles. Aggregate material (identified as recycled concrete, limestone, granite, and mineral aggregate deposits, which includes but is not limited to sand, gravel, and stone) will be received from a ship off-loading conveyor and transferred to the dockside hopper. The dockside hopper will then transfer the material to Conveyor 1 which will then transfer the material to Conveyor 2. Conveyor 2 will transfer the material to Radial Stacker No. 1, which will either transfer the material to a storage pile, or to Conveyor 4 or Conveyor 5. If the material is directed to Conveyor 4, it will be transferred to Radial Stacker No. 2 and then onto a storage pile. If the material is directed to Conveyor 5, it will be transferred to Radial Stacker No. 3 and then onto a storage pile. A front-end loader will load the material from the storage piles into trucks or railcars for shipment offsite. There will be no enclosures on the conveyors or the transfer points. This permit will require that enclosures around the conveyor drop points be installed. The facility will handle a maximum of 1,200,000 tons/year of aggregate material.

Location: 4219 Maritime Blvd., Tampa, FL 33605

UTM: 17- 359.94E 3087.81N Facility ID No.: 0571290

Emission Unit Nos.:

- EU No. 001 - Filter/Receiver
- EU No. 002 - Truck and Railcar Loading Station No. 1
- EU No. 003 – Truck and Railcar Loading Station No. 2
- EU No. 006 - Interstitial Silo No. 5
- EU No. 007 - Interstitial Silo No. 6
- EU No. 011 - Surge and Charging Vessels Baghouse No. 1
- EU No. 012 - Surge and Charging Vessels Baghouse No. 2
- EU No. 014 - Aggregate Material Handling
 - Emission Point (EP) No. 1: Ship Conveyor to Hopper
 - EP No. 2: Hopper to Conveyor 1
 - EP No. 3: Conveyor 1 to Conveyor 2
 - EP No. 4: Conveyor 2 to Stacker 1
 - EP No. 5: Stacker 1 to Conveyor 4 or to Conveyor 5
 - EP No. 6: Conveyor 4 to Stacker 2 or Conveyor 5 to Stacker 3
 - EP No. 7: Stacker 1 or 2 or 3 to Pile
 - EP No. 8: Pile to Truck
- EU No. 021 - Ship Loading

References Permit Nos.: 0571290-002-AC, 0571290-004-AC, and 0571290-007-AC

Replaces Permit No.: NA

PERMITTEE:
Titan America, LLC

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SPECIFIC CONDITIONS:

Facility wide conditions

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 prior to construction. [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 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(2), F.A.C.]
5. 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.
6. As requested by the permittee, in order to limit the potential to emit for Hazardous Air Pollutants (HAP), the HAP, as defined in Rule 62-210.200, F.A.C., emissions shall be less than 10 tons for any individual HAP and less than 25 tons for any combination of HAPs in any 12 consecutive month period. [Rules 62-212.300, 62-210.200, and 62-4.070(3), F.A.C. and Permit No. 0571209-004-AC]
7. When used in this permit the term Concrete Raw Materials is defined as Portland Cement Types I, II, III, IV, V, white cement, masonry cement, flyash, slag cement, natural and synthetic gypsum, lime, cement kiln dust, natural pozzolana, and artificially produced pozzolana materials. [Rule 62-4.070(3), F.A.C. and Permit No. 0571209-004-AC]
8. Each baghouse shall have a device capable of monitoring the pressure differential across the baghouse. The monitoring device shall be maintained in working order and shall be calibrated and adjusted to indicate the true value of the pressure drop with sufficient accuracy to allow the pressure drop to be determined within 10% of its true value. [Rules 62-4.070(3) and 62-297.310(5)(a) and (b), F.A.C.]
9. The baghouses controlling the sources under this permit shall be kept in good repair. [Rule 62-4.070(3), F.A.C.]
10. The permittee shall not allow any person to circumvent any pollution control device or allow the emissions of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]

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11. The permittee shall not circumvent the provisions of an applicable emission limitation by increasing the volume of gas in any exhaust or group of exhausts for the purpose of reducing the stack gas concentration. This includes allowing dilution air to enter the system through leaks, open vents, or similar means. [Rule 62-296.700(5), F.A.C.]

12. 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.]

13. 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.]

14. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the EPC in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the EPC. [Rules 62-4.130 and 62-4.070(3), F.A.C.]

15. The owner or operator shall notify 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 test contact person who will be responsible for coordinating and having such test conducted. [Rule 62-297.310(7)(a)9., F.A.C.]

16. Submit two copies any test data to the Air Compliance Section of the Air Management Division of the Environmental Protection Commission of Hillsborough County within forty-five days of such testing. Test procedures shall be consistent with the requirements of Rule 62-297.310, F.A.C. [Rule 62-297.310(8)(b), F.A.C.]

17. 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.]

18. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: [Rule 62-296.320(4)(c), F.A.C.]

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- A) Use covers or wind shields at the shiphold, as necessary, to meet the opacity standard.
- B) Attend to major operational upsets promptly and effectively. Stop operation, if necessary.
- C) Curtail operations during high wind conditions, if necessary.
- D) On days when the equipment is in use, inspect the screw auger and screw conveyor for visible emissions daily. Record any problems and actions taken.
- E) Maintain trafficked areas clean. Post a sign to limit vehicle speeds to 10 miles per hour.
- F) Exercise good housekeeping practices at all times.
- G) Paving or maintenance of roads, parking areas, and yards.
- H) Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, and open stock piles, as necessary.
- I) 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 areas to prevent particulates from becoming airborne, as necessary.
- J) Each conveyor transfer point shall have enclosures to ensure compliance with the 5% opacity standard.

19. 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(205), F.A.C. 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: [Rules 62-210.300 and 62-4.070(3), F.A.C.]

- A) Alteration or replacement of any equipment or major component of such equipment.
- B) Installation or addition of any equipment which is a source of air pollution.
- C) The handling of any new material not identified in this permit.

20. The permittee shall monitor, maintain, and operate the pollution control equipment in accordance with the Operations and Maintenance Plan (O&M Plan) attached to this permit. [Rules 62-296.700(6) and 62-4.070(3), F.A.C.]

21. 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.]

22. The permittee shall submit to the Environmental Protection Commission of Hillsborough County each calendar year, a completed DEP Form 62-210.900(5), "Annual Operating Report (AOR) for Air Pollutant Emitting Facility", for the preceding calendar year. The AOR shall be submitted by April 1 of the following year. [Rule 62-210.370(3), F.A.C.]

23. A minimum of two copies of an air operating permit application shall be submitted to the Environmental Protection Commission of Hillsborough County within 60 days of completion of

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compliance testing of the new conveying system or at least 90 days prior to the expiration date of this permit, whichever occurs first. [Rules 62-4.050(2) and 62-4.090, F.A.C.]

Conditions Specific to EU Nos. 001, 006, 007, 011, 012

24. The maximum throughput of concrete raw materials shall not exceed 750,000 tons per any twelve consecutive month period. [Rule 62-4.070(3), F.A.C. and Permit No. 0571290-004-AC]

25. The maximum combined unloading rate from the railcar and the truck into the silos shall not exceed 100 tons/hour. [Rule 62-4.070(3), F.A.C. and Permit No. 0571290-004-AC]

26. The filter/receiver and/or the baghouses shall be in operation during the silo(s) filling operation and during the transfer of concrete raw materials. [Rule 62-4.070(3), F.A.C. and Permit No. 0571290-004-AC]

27. The following restrictions and limitations shall apply to ensure compliance with Specific Condition No. 30: [Rule 62-4.070(3), F.A.C., and Permit No. 0571290-002-AC]

- A) Open holds on the delivery vessel shall be tarped as necessary to ensure 5% opacity or less.
- B) Front-end loaders, bulldozers, etc. may be used in any open shiphold to help collect the final twelve inches of concrete raw materials which remains at the bottom of the shiphold. Manual sweeping may be used as well, but no blowers are allowed.
- C) During high wind conditions, all of the shipholds filled with concrete raw materials shall be completely enclosed with a tarp or a permanent hatch.

28. The maximum potential and allowable particulate matter emissions shall not exceed the following per any twelve consecutive month period: [Rule 62-296.711(2), F.A.C. and Permit No. 0571290-004-AC]

<u>EU No. and Description</u>	<u>Control Equipment</u>	<u>Control Equipment Model No.</u>	<u>DSCFM</u>	<u>Pollutant</u>	<u>Potential Emissions (Tons/yr)</u>	<u>Allowable Emissions</u>
001 - Filter/Receiver	F.L. Schmidt Jet Pulse Baghouse	398FR12(6)	25,000	PM	28.2	0.03 grains/dscf
006 - Interstitial Silo No. 5	F.L. Schmidt Airtech Jet Pulse Baghouse	48DS8FM	1790	PM	2.0	0.03 grains/dscf
007 - Interstitial Silo No. 6	F.L. Schmidt Airtech Jet Pulse Baghouse	48DS8FM	1790	PM	2.0	0.03 grains/dscf

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<u>EU No. and Description</u>	<u>Control Equipment</u>	<u>Control Equipment Model No.</u>	<u>DSCFM</u>	<u>Pollutant</u>	<u>Potential Emissions (Tons/yr)</u>	<u>Allowable Emissions</u>
011 - Surge and Charging Vessels Jet Pulse Baghouse No. 1	DCE Jet Pulse Baghouse	Dalamatic DLM V20/10F5	1400	PM	1.6	0.03 grains/dscf
012 - Surge and Charging Vessels Jet Pulse Baghouse No. 2	DCE Jet Pulse Baghouse	Dalamatic DLM	1400	PM	1.6	0.03 grains/dscf

29. Emission Unit Nos. 001, 006, 007, 011, and 012 are authorized to operate continuously (8,760 hours/year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C. and Permit No. 0571290-004-AC]

30. The permittee shall not cause, permit, or allow any visible emissions (5% opacity) from Emission Unit Nos. 001, 006, 007, 011, and 012. [Rule 62-296.711(2), F.A.C. and Permit No. 0571290-004-AC]

31. During each federal fiscal year (October 1st to September 30th), test for visible emissions as follows and submit two copies of the test data to the Air Management Division of the Environmental Protection Commission of Hillsborough County within forty-five days of such testing. Testing procedures shall be consistent with the requirements of Rule 62-297.310, F.A.C. [Rule 62-297.310 and 62-4.070(3), F.A.C.]

- A) Test the truck or railcar unloading operation at the filter/receiver baghouse exhaust.
- B) Test the truck or railcar unloading operation at each interstitial silo baghouse.
- C) Test the filter/receiver baghouse exhaust the next time a ship is unloaded and annually thereafter while all four ship unloading delivery lines are in use.
- D) Test the Surge and Charging Vessel Baghouse No. 1 and Surge and Charging Vessel Baghouse No. 2 exhaust the next time a ship is unloaded and annually thereafter. Each test shall be conducted as follows:
 - i. All four ship unloading delivery lines shall be in use.
 - ii. Test the surge vessel and four charging vessels at their respective jet pulse baghouses' exhaust stacks.

32. Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 90-100% of the rated capacity of 881 TPH for the ship unloading transfer rate into the filter/receiver and 440 TPH for the ship unloading transfer rate into each interstitial silo; and a gauge pressure of 12 psi while unloading trucks and/or railcars. 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 rate until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more

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than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the EPC. The test report shall include the unloading rates, the baghouse pressure drops, and the unloading pressure gauge. Failure to submit the actual operating conditions may invalidate the test. [Rules 62-4.070(3) and 62-297.310(2)(b), F.A.C.]

33. Compliance with the emission limitations of Specific Condition No. 30 shall be determined using EPA Method 9 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. [Rule 62-297.310, F.A.C.]

34. In order to demonstrate compliance with Specific Condition Nos. 24, 25, and 28, the permittee shall maintain a monthly recordkeeping system for the most recent three year period. However, the facility should maintain daily records and make them available upon request. The records shall be made available to the Environmental Protection Commission of Hillsborough County, state or federal air pollution agency upon request. The records shall include, but not limited to, the following:[Rules 62-4.070(3) and 62-213.440(1)(b)2.b., F.A.C.]

- A) Month, Year
- B) Type of unloading operation (i.e., ship unloading, railcar unloading, or truck unloading)
- C) Amount and type of material unloaded (tons)
- D) Hours of operation of each Emission Unit
- E) Twelve month rolling total of C) and D) above
- F) A checklist of the items in the Operation and Maintenance Plan, including any corrective actions taken

Conditions Specific to EU Nos. 002 and 003

35. The maximum throughput of concrete raw materials loaded shall not exceed 750,000 tons per twelve consecutive month period. [Rule 62-4.070(3), F.A.C. and Permit No. 0571290-004-AC]

36. The maximum concrete raw materials loading rate shall not exceed 300 tons/hour for each loading station. [Rule 62-4.070(3), F.A.C. and Permit No. 0571290-004-AC]

37. The maximum potential and allowable particulate matter emissions shall not exceed the following per any twelve consecutive month period: [Rule 62-296.711(2), F.A.C. and Permit No. 0571290-004-AC]

<u>EU No. and Description</u>	<u>Control Equipment</u>	<u>Control Equipment Model No.</u>	<u>DSCFM</u>	<u>Pollutant</u>	<u>Potential Emissions (Tons/yr)</u>	<u>Allowable Emissions</u>
002 - Truck Loading Station No. 1	DCL Jet Pulse Baghouse	CFM 330-1F14	2000	PM	2.3	0.03 grains/dscf

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Titan America, LLC

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<u>EU No. and Description</u>	<u>Control Equipment</u>	<u>Control Equipment Model No.</u>	<u>DSCFM</u>	<u>Pollutant</u>	<u>Potential Emissions (Tons/yr)</u>	<u>Allowable Emissions</u>
003 – Truck and Railcar Loading Station No. 2	DCL Jet Pulse Baghouse	CFM 330-1F14	2000	PM	2.3	0.03 grains/dscf

38. When material is loaded into trucks or railcars, only enclosed railcars and trucks may be loaded. Loading into open bed railcars or trucks is not permitted. [Rule 62-4.070(3), F.A.C. and Permit No. 0571290-004-AC]

39. Each loading station’s jet pulse baghouse shall be in operation while loading is occurring. [Rule 62-4.070(3), F.A.C. and Permit No. 0571290-004-AC]

40. Each emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C. and Permit No. 0571290-004-AC]

41. The permittee shall not cause, permit, or allow any visible emissions (5% opacity) from any emission unit or emission point. [Rule 62-296.711(2), F.A.C. and Permit No. 0571290-004-AC]

42. During each federal fiscal year (October 1st to September 30th), test each loading spout and each baghouse exhaust for visible emissions while operating in each of the loading modes (truck or railcar loading; and direct export). Submit two copies of the test results to the Environmental Protection Commission of Hillsborough County within 45 days of testing. The visible emission tests shall be conducted in accordance with Rule 62-297.310, F.A.C. [Rules 62-297 and 62-4.070(3), F.A.C.]

43. Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 90-100% of rated capacity of loading 300 tons/hour. 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 rate until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the EPC. The test report shall include the loading rates and the baghouse pressure drops. Failure to submit the actual operating conditions may invalidate the test. [Rules 62-4.070(3) and 62-297.310(2)(b), F.A.C.]

44. Compliance with the emission limitations of Specific Condition No. 41 shall be determined using EPA Method 9 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. [Rule 62-297.310, F.A.C.]

45. To demonstrate compliance with Specific Condition Nos. 35, 36, and 37 the permittee shall maintain a monthly recordkeeping system for the most recent three year period. However, the facility should

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maintain daily records and make them available upon request. The records shall be made available to the Environmental Protection Commission of Hillsborough County, state or federal air pollution agency upon request. The records shall include, but not limited to, the following: [Rules 62-4.070(3) and 62-213.440(1)(b)2.b., F.A.C.]

- A) Month, Year
- B) Amount and type of material loaded (tons)
- C) Hours of operation for each loading station
- D) Rolling twelve month total of B) and C) above
- E) A checklist of the items in the Appendix Operation and Maintenance Plan, including any corrective actions taken

Conditions Specific to EU No. 021

46. The following restrictions and limitations shall apply per twelve consecutive month period: [Rule 62-4.070(3), F.A.C. and Permit No. 0571290-004-AC]

- A) Only concrete raw materials shall be pneumatically loaded into ships.
- B) Ships shall be loaded by tanker trucks and/or railcars.
- C) The maximum concrete raw material transfer rate into the ship shall not exceed 300 tons/hour.
- D) The maximum concrete raw material throughput shall not exceed 750,000 tons per twelve consecutive month period.
- E) The maximum combined number of trucks and railcars unloading into a ship at one time while using the trucks' and/or railcars' onboard pumps shall not exceed twelve.
- F) The maximum hours of operation of the ship loading operation shall not exceed 2,500 hours per twelve consecutive month period.
- G) Either the portable baghouse or the shipboard baghouse shall be in operation during all ship loading activities.
- H) All dust laden gases shall be vented to the corresponding baghouse.

47. As requested by the permittee, in order to limit the potential to emit, the potential and allowable particulate matter emissions shall not exceed the following per any twelve consecutive month period: [Rule 62-296.711(2)(b), F.A.C. and Permit No. 0571290-004-AC]

<u>EU No. and Description</u>	<u>Control Equipment</u>	<u>DSCFM</u>	<u>Pollutant</u>	<u>Potential Emissions (Tons/yr)</u>	<u>Allowable Emissions</u>
021 - Ship Loading	Pulse Jet Baghouse	48,179	PM	15.5	0.03 gr/dscf

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48. In order to ensure compliance with Specific Condition No. 47, the baghouses and stationary compression ignition internal combustion engines (CI ICE) used during ship loading shall meet, at a minimum, the following specifications: [Rule 62-4.070(3), F.A.C. and Permit No. 0571290-004-AC]

- A) Portable Baghouse Controlling Ship Loading
 - i. Type of Baghouse: Pulse Jet Cartridge Filter
 - ii. Pressure Drop: 0 - 17 inches of water
 - iii. Air to Cloth Ratio: 9.6:1 (maximum)
 - iv. A minimum 12-minute Method 9 observation is required for any dust collector in operation with a pressure differential reading greater than 6 inches water to confirm compliance with the visible emission standard.
 - v. The permittee shall maintain manufacturer's specifications on the portable baghouse used during each loading operation.

- B) Shipboard Baghouse Controlling Ship Loading
 - i. The permittee shall maintain manufacturer's specifications on the shipboard baghouse used during each loading operation.

- C) Stationary Compression Ignition Internal Combustion Engine (CI ICE) Powering the Portable Baghouse
 - i. Operate no more than one diesel fired CI ICE rated at 99 HP or less.
 - ii. If the CI ICE(s) was constructed, modified, or reconstructed after July 2005 or the CI ICE(s) was manufactured after April 1, 2006, then the permittee shall maintain compliance with 40 CFR 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines).
 - iii. The permittee shall maintain compliance with 40 CFR 63, Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines).
 - iv. The permittee shall maintain manufacturer's specifications on the CI ICE used with the portable baghouse to demonstrate compliance with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ, for each CI ICE used in each loading operation.

49. The emission unit may operate a maximum of 2,500 hours per twelve consecutive month period. [Rule 62-210.200(PTE), F.A.C. and Permit No. 0571290-004-AC]

50. Visible emissions from each baghouse exhaust and the shiphold shall not exceed 5% opacity. [Rule 62-296.711(2)(a), F.A.C.]

51. During each federal fiscal year (October 1st to September 30th), test the portable baghouse and the shipboard baghouse for visible emissions. Submit two copies of the test results to the Environmental Protection Commission of Hillsborough County within 45 days of testing. The visible emission tests shall be conducted in accordance with Rule 62-297.310, F.A.C. [Rules 62-297 and 62-4.070(3), F.A.C.]

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52. Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 90-100% of rated capacity of transferring 300 tons per hour of concrete raw materials into a ship. 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. The test report shall include the baghouse type and model number, airflow rate, and pressure drop. The test report shall include the loading rates and the baghouse pressure drops. Failure to submit the actual operating conditions may invalidate the test. [Rules 62-4.070(3) and 62-297.310, F.A.C.]

53. Compliance with the emission limitations of Specific Condition No. 50 shall be determined using EPA Method 9 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. [Rule 62-297.310, F.A.C.]

54. In order to demonstrate compliance with the limits established in Specific Condition Nos. 46 and 48, the permittee shall maintain a monthly recordkeeping system for the most recent three year period. However, the facility should maintain daily records and make them available upon request. The records shall be made available to the Environmental Protection Commission of Hillsborough County, state and federal officials upon request and shall include, but not limited to, the following: [Rules 62-213.440(1)(b)2.b. and 62-4.070(3), F.A.C. and Permit No. 0571290-004-AC]

- A) Month, Year
- B) Amount and type of material loaded into ships (tons)
- C) Hours of operation of each emission unit
- D) Rolling twelve month total of B) and C) above
- E) Type of baghouse used during ship loading (i.e., portable baghouse or shipboard baghouse)
- F) The make, model number, and air flowrate of the baghouse used during ship loading
- G) The horsepower and the displacement volume of the engine powering the portable baghouse used during ship loading
- H) Records as required by 40 CFR 63 Subpart ZZZZ and 40 CFR 60 Subpart III

Conditions Specific to EU No. 014

55. The following restrictions and limitations shall apply: [Rule 62-4.070(3), F.A.C.]

- A) Only recycled concrete, limestone, granite, and mineral aggregate deposits, which includes but is not limited to sand, gravel, and stone shall be handled through the aggregate material handling operation.
- B) The combined throughput of the materials in A) above received by ship for the aggregate

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handling operation shall not exceed 1,200,000 tons per any consecutive 12-month period.

- C) The maximum ship unloading rate shall not exceed 2,500 tons/hr.
- D) The maximum truck loading and railcar loading rate shall not exceed 600 tons/hr.
- E) Each conveyor transfer point shall have enclosures to ensure compliance with the 5% opacity standard.
- F) [Reserved]
- G) [Reserved]
- H) Test each shipment of aggregate on-site as received from ships to ensure that the moisture content of the material is a minimum of 2.7%. If it is less than 2.7%, water sprays must be placed in operation at the unloading hopper, and at all other transfer points as necessary, until the moisture content meets the minimum standard. The water sprays shall remain in operation as necessary to maintain the moisture content.

56. The permittee shall not cause, permit, or allow any visible emissions (five percent opacity) from any aggregate handling activity, emission point, or any transfer point at the facility, including but not limited to, the points listed below: [Rule 62-296.711(2)(a), F.A.C. and Chapter 1-3.52(2), Rules of the EPC]

- A) Ship Conveyor to Hopper
- B) Hopper to Conveyor 1
- C) Conveyor 1 to Conveyor 2
- D) Conveyor 2 to Stacker 1
- E) Stacker 1 to Conveyor 4 or to Conveyor 5
- F) Conveyor 4 to Stacker 2 or Conveyor 5 to Stacker 3
- G) Stacker 1 or 2 or 3 to Pile
- H) Pile to Truck

57. Test each emission point associated with EU 014 for visible emissions at the point of highest opacity, the first time that aggregate material is handled in the new conveying system, and annually thereafter. Submit two copies of the test results to the Environmental Protection Commission of Hillsborough County within 45 days of testing. The following visible emission tests shall be conducted in accordance with Rule 62-297.310, F.A.C. [Rules 62-297.310(4)(a)2.a. and (7), F.A.C.]

58. Compliance with the emission limitations of Specific Condition No. 56 shall be determined using EPA Method 9 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 62-297, F.A.C. The EPA Method 9 test shall be at least 30 minutes in duration unless the operation is completed in less than 30 minutes and does not reoccur during the observation period. 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, 62-297.310(4)(a)2, and 62-296.711(3)(a) F.A.C.]

59. Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 90-100% of rated capacities of 2,500 tons/hour for the ship unloading and conveyor transfer rates and 600 tons/hour for the truck and/or railcar loading rate. If it is impracticable to test at capacity, then the source

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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 the purpose of additional compliance testing to regain the rated capacity in the permit, with prior notification to the EPC. Failure to submit the unloading and loading rates and actual operating conditions may invalidate the test. [Rules 62-4.070(3) and 62-297.310(2), F.A.C.]

60. The permittee shall ensure that the aggregate handling operations are in compliance with the following operation and maintenance plan: [Rule 62-4.070(3), F.A.C.]

A) Daily (when in operation)

- i. Check the material for adequate moisture at the receiving point.
- ii. Use the water spray system as needed to address excess particulate matter emissions due to insufficient moisture content of the product as received.
- iii. Maintain the unpaved trafficked areas adequately wet, as necessary, to minimize the generation of fugitive emissions.
- iv. Inspect the material drop points and maintain a minimum drop height distance as reasonably possible.
- v. Minimize the pile height as needed.
- vi. Inspect the road and other paved surfaces. Clean as necessary.

61. In order to ensure compliance with Specific Condition Nos. 55 and 60, the permittee shall maintain a recordkeeping system as detailed below. The facility should also maintain daily records and make them available upon request to document aggregate handling operations performed on each date. The records shall be maintained onsite for three years and shall be made available upon request to any local, state, or federal air pollution agency upon request. The records shall include, but are not limited to, the following: [Rules 62-213.440(1)(b)2.b. and 62-4.070(3), F.A.C.]

- A) Month, Year
- B) Amount and type of material received (tons)
- C) Amount and type of material loaded into trucks or railcars (tons)
- D) Rolling 12-month total of B) and C) above
- E) Records of maintenance inspections as required by Specific Condition No. 60
- F) Records of moisture content testing on each aggregate shipment received from ships

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

Richard D. Garrity, Ph.D.
Executive Director

