Florida Department of Environmental Protection

Northeast District
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Jacksonville, Florida 32256

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

PERMITTEE

The Chemours Company FC, LLC
5222 Treat Road
Starke, Florida 32091

Authorized Representative:

Ms. Nicole Newell, Plant Manager

Air Permit No. 0190011-020-AC
Expiration Date: July 16, 2019

Chemours Trail Ridge Facility

Minor Air Construction Permit

Reclassification as Non-Title V Source

PROJECT

This is the final air construction permit that reclassifies the Chemours Trail Ridge facility as a Non-Title V source. The proposed work will be conducted at the Chemours Trail Ridge facility, which is categorized under Standard Industrial Classification No. 1099- Miscellaneous Metal Ores, Not Elsewhere Classified. The existing facility is located in Clay County at 4641 FL-230, Starke, Florida 32091. The UTM coordinates are Zone 17, 400.23 kilometers (km) East, and 3308.58 km North.

This final permit is organized by the following sections: (General Information); Section 2 (Administrative Requirements); Section 3 (Facility-Wide Conditions); Section 4 (Emissions Unit Specific Conditions); Section 5 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 5 of this permit. As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

STATEMENT OF BASIS

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

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Jacksonville, Florida

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Thomas G. Kallemeyn
Permitting Program Administrator

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) and all copies were sent on the filing date below to the following listed persons:

Ms. Nicole Newell, Plant Manager, The Chemours Company FC, LLC: Nicole.t.newell@chemours.com
Ms. Connie Henderson, Environmental Manager, The Chemours Company FC, LLC: connie.henderson@chemours.com
Mr. Pradeep Raval, Consultant, Koogler and Associates, Inc.: praval@kooglerassociates.com
Ms. Veronica N. Sgro, P.E., Koogler and Associates, Inc.: vsgro@kooglerassociates.com

Clerk

July 16, 2018
Date

FACILITY DESCRIPTION

Existing Facility

This facility mines and processes heavy mineral sands (Staurolite sand, zircon sand, titanium oxide sand, montmorillonite clay and other heavy metallic mineral concentrates). The facility consists of an Ilmenite dryer, a Zircore Kiln, a Zircon Kiln, a feed system, Reciprocating Internal Combustion Engine (RICE) units, a load-out system, and an independent rail loadout system.

The following is a brief description of the facility operations and emissions units:

Zircore Kiln (EU 002). This unit consists of a kiln for Zircore heavy mineral sands with a maximum production rate of 4.5 tons per hour (dried) and a maximum heat input rate of 11 MMBtu per hour. Natural gas is the only authorized fuel. A cyclone is used for product recovery and exhaust gases are emitted through a single vertical stack.

Zircon Kiln (EU 003). This unit consists of a kiln for Zircon concentrate with a maximum production rate of 18.0 tons per hour (dried) and a maximum heat input rate of 23 MMBtu per hour. Natural gas is the only authorized fuel. A cyclone is used for product recovery and exhaust gases are emitted through a single vertical stack.

Ilmenite Dryer No. 2 (EU 004). This unit consists of a heavy mineral sand dryer has a maximum production rate of 70.0 tons per hour (dried) and a maximum heat input rate of 23 MMBtu per hour. Natural gas is the only authorized fuel. Particulate Matter emissions are controlled with a baghouse and are emitted through a single vertical stack.

Product Handling and Transfer Operations (EU 005). This unit consists of the various sources of fugitive emissions (screens, bucket elevators, conveyor belt transfer points, storage bins, product packaging stations) that are subject to the requirements of 40 CFR 60 Subpart LL.

Independent Rail Loadout System (EU 010). This unit is a railcar loadout conveyor system. Material is processed by the Trail Ridge facility and the Twin Pines Minerals facility. The rail loadout conveyor system is limited to no more than 300,000 tons per year of mineral sands.

The facility operates a gasoline dispensing system that is subject to 40 CFR 63, Subpart CCCCCC.

Facility ID No. 0190011

ID No.	Emission Unit Description
002	Zircore Kiln
003	Zircon Kiln
004	Ilmenite Dryer No. 2
005	Product Handling and Transfer Operations- Fugitive Emissions
010	Independent Rail Loadout System

The following Emissions Points were previously identified in the former Title V Operation Permit as an Unregulated Emissions Unit/Activity.

For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. For air construction permitting or non-title V air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply.

Therefore, after consultation with the Division of Air, the former Unregulated Emissions Units and Activities that were in identified in Appendix U of the previous Title V Operation Permit No. 0190011-014-AV are now individually and collectively identified as exempt from requiring an air construction permit and Non-Title V Operation permit.

EP ID	Emission Point Description	EP ID	Emission Point Description	EP ID	Emission Point Description
01	Zircon #5 Screen	027	Ilmenite #13 Elevator	053	Ilmenite #28 conveyor
02	Zircon #6 Screen	028	Ilmenite #10 Elevator	054	Ilmenite #30 conveyor
03	Zircon #7 Screen	029	Ilmenite #8 Elevator	055	Ilmenite #32 conveyor
04	Zircon #8 Screen	030	Ilmenite #14 Elevator	056	Zircon #2 Bin
05	Zircon #34 Screen	031	Zircon #1 Conveyor	057	Zircon #3 Bin
06	Ilmenite #8 Screen	032	Zircon #2 Conveyor	058	Zircon #5 Bin
07	Ilmenite #9 Screen	033	Zircon #3 Conveyor	059	Zircon N #6 Bin
08	Ilmenite #10 Screen	034	Zircon #17 Conveyor	060	Zircon #8 Bin
09	Ilmenite #12 Screen	035	Zircon #18 Conveyor	061	Zircon #15 Bin
010	Ilmenite #14 Screen	036	Zircon #19 Conveyor	062	Zircore #1 Bin
011	Ilmenite #11 Screen	037	Zircore #1 Conveyor	063	Zircore #2 Bin
012	Zircon #3 Screen	038	Zircore #2 Conveyor	064	Zircore #3 Bin
013	Zircon #9 Screen	039	Zircore #3 Conveyor	065	Zircore #5 Bin
014	Zircore #1 Screen	040	Ilmenite #9 conveyor	066	Zircore #6 Bin
015	Zircore #2 Screen	041	Ilmenite #11 conveyor	067	Ilmenite #2 Bin
016	Ilmenite #13 Screen	042	Ilmenite #14 conveyor	068	Ilmenite #3 Bin
017	Zircon Elevator 1	043	Ilmenite #15 conveyor	069	Ilmenite #4 Bin
018	Zircon Elevator 3	044	Ilmenite #16 conveyor	070	Ilmenite #5 Bin
019	Zircon Elevator 5	045	Ilmenite #17 conveyor	071	Ilmenite #6 Bin
020	Zircore # 1 Elevator	046	Ilmenite #18 conveyor	072	Ilmenite #7 Bin
021	Zircore #2 Elevator	047	Ilmenite #19 conveyor	073	Ilmenite #8 Bin
022	Zircore #3 Elevator	048	Ilmenite #21conveyor	074	Ilmenite #9 Bin
023	Ilmenite # 5 Elevator	049	Ilmenite #23 conveyor	075	Ilmenite #10 Bin
024	Ilmenite # 6 Elevator	050	Ilmenite #24 conveyor	076	Chemical Erosion from Stockpiles
025	Ilmenite #7 Elevator	051	Ilmenite #25 conveyor	077	Settling Pond Liming Activities and Other Wastewater Treatment Activities
026	Ilmenite #12 Elevator	052	Ilmenite #26 conveyor		

The following emissions units/activities were previously identified in the previous Title V Operation Permit as Insignificant Emissions Units/Activities. For air construction permitting or non-title V air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. Therefore, the following emissions units/activities are exempt from the requirement to obtain an air construction permit and Non-Title V Operation permit:

Emission Unit/Activity	Rule
Abrasive cleaning – indoors	EPA Trivial List
Agricultural related activities	EPA Trivial List
Air Compressors	EPA Trivial List
Air Conditioners	EPA Trivial List
Air vents in compressed air systems	EPA Trivial List
Automatic oil/lube systems for mechanical equipment and fueling operations	Rule 62-210.300(3)(a)16, F.A.C.: Petroleum lubrication systems
Automotive, tractor, locomotives and their repair shops	EPA Trivial List
Blueprint copier	EPA Trivial List
Building ventilation systems	EPA Trivial List
Closed containers of maintenance chemicals	EPA Trivial List
Cold cleaning degreasers (containing heavier than air solvents)	Rule 62-210.300(3)(a)23, F.A.C.: Degreasing units using heavier-than-air vapors exclusively, provided that such units shall not use any substance containing any HAP
Construction/repair of office, storage and residential units	EPA Trivial List
Containers, reservoirs, wax and grease	EPA Trivial List
Containers and tanks for oils	Generic Exemption Criteria
Diesel pump motors	Rule 62-210.300(3)(a)19, F.A.C.: Vehicle refueling operations and associated fuel storage
Drinking water treatment area and wastewater treatment plant	EPA Trivial List
Ducts, chutes, equipment maintenance	EPA Trivial List
Dumpsters, other miscellaneous waste collection and handling	EPA Trivial List
Electric substation/electric yard	Generic Exemption Criteria
Electric -power vehicles	EPA Trivial List
Electrical charging systems	EPA Trivial List
Electrically heated equipment for heat treating, drying, annealing, etc.	EPA Trivial List
Equipment cleaning, including steam cleaning	EPA Trivial List
Equipment for bonding brake shoes	EPA Trivial List
Equipment of hydraulic or hydrostatic testing	EPA Trivial List
Fire training exercises	EPA Trivial List
Food preparation, handling, consumption	EPA Trivial List
Fresh water tanks/vents	EPA Trivial List

Emission Unit/Activity	Rule
Fuel tanks and dispensers *Includes equipment that is defined as an affected source in 40 CFR 63 Subpart CCCCCC. This Subpart has not been adopted by the State.*	EPA Trivial List
Hand held equipment	EPA Trivial List
Handling of baghouse materials	Generic Exemption Criteria
Hydro blasting	EPA Trivial List
Instrument air systems/vents	EPA Trivial List
Laboratories (quality control, analytical, Metallurgical)	Rule 62-210.300(3)(a)12, F.A.C.: Laboratory equipment used exclusively for chemical or physical analyses
Landscaping and farm equipment	EPA Trivial List
Liquid sampling systems	EPA Trivial List
Maintenance of facilities	EPA Trivial List
Maintenance of grounds	EPA Trivial List
Maintenance shops	EPA Trivial List
Mechanical drives/gearboxes	EPA Trivial List
Metal shops	Rule 62-210.300(3)(a)13, F.A.C.: Brazing, soldering or welding equipment
Minor fugitive leaks from process equipment	Generic Exemption Criteria
Mobile equipment fueling operations (diesel/gasoline) *Includes equipment that is defined as an affected source in 40 CFR 63 Subpart CCCCCC. This Subpart has not been adopted by the State.*	EPA Trivial List
Mobile sources, including internal combustion engines, pumps, compressors, generators, wielding, etc.	EPA Trivial List
Neutralization tanks/vents	EPA Trivial List
Non process mineral spirits use	EPA Trivial List
Open containers in use	EPA Trivial List
Painting/coating of equipment, tanks and structures (less than 6 gallons per day)	EPA Trivial List
Portable kerosene space heaters	Rule 62-210.300(3)(a)9, F.A.C.: Equipment used exclusively for space heating, other than boilers
Pressure/steam relief valves	EPA Trivial List
Process water treatment and management systems	Generic Exemption Criteria
Pump seals	Generic Exemption Criteria
Purchased non-listed chemical tanks/vents (no HAP or VOC content)	Generic Exemption Criteria
Railcar/truck/tanker unloading	Generic Exemption Criteria
Railroad flares	EPA Trivial List
Raw material, reclaim/recycle material and product transfer and storage tanks	Generic Exemption Criteria
Reclaimed mined areas	Generic Exemption Criteria

Emission Unit/Activity	Rule
Reclaimed water tank vents	EPA Trivial List
Refrigeration systems	Rule 62-210.300(3)(a)5, F.A.C.: Cold storage refrigeration equipment, except for any such equipment located at a TV source using an ozone-depleting substance regulated under 40 CFR Part 82
Rock pile, rock hoppers, rock grinding mills (not 40 CFR 60 Subpart OOO)	Generic Exemption Criteria
Safety devices	Rule 62-210.300(3)(a)15, F.A.C.: Fire and safety equipment
Safety kleen non-halogenated/haz solvent cleaners	Rule 62-210.300(3)(a)24, F.A.C.: Nonhalogenated solvent storage and cleaning
Sandblasters, welding equipment, compressors, wood shop, metal shop	EPA Trivial List
Service of equipment	EPA Trivial List
Space heaters	Rule 62-210.300(3)(a)9, F.A.C.: Equipment used exclusively for space heating, other than boilers
Steam vents/leaks	EPA Trivial List
Storage tanks and dispensers *Includes equipment that is defined as an affected source in 40 CFR 63 Subpart CCCCCC. This Subpart has not been adopted by the State.*	EPA Trivial List
Sweeping and general cleanup	EPA Trivial List
Temporary use of compressors, generators, water pumps with internal combustion engines	EPA Trivial List
Transfer of materials on covered belt systems	Generic Exemption Criteria
Transformer vault/building	Generic Exemption Criteria
Vacuum cleaning systems	EPA Trivial List
Washing and cleaning equipment	EPA Trivial List
Waste preparation for disposal (in closed drums or other containers, spill cleanup)	EPA Trivial List
Water pumps lubrication	Rule 62-210.300(3)(a)16, F.A.C.: Petroleum lubrication systems
Water treatment aeration	EPA Trivial List
Water treatment chemical tanks/totes/drums	EPA Trivial List
Woodworking shops	EPA Trivial List
Choke feeder, covered conveyors, screening operations	Generic Exemption Criteria
Miscellaneous non-NSPS material handling and storage operations: fugitive PM Emissions	

It is noted that these emissions points and emissions units/activities are subject to the facility wide General Visible Emissions standard in Rule 62-296.320(4)(b)1., F.A.C.

The following Emissions Units were previously identified in the previous Title V Operation Permit as Regulated Emissions Units. These Emissions Units meet the categorical exemption criteria and therefore are exempt from the requirement to obtain a construction permit and a Non-Title V Operation permit:

EU No.	Emission Unit /Activity	Rule
008	Onan, 166 HP Diesel Engine, Model No. 100 DGDB *This engine is for a 122 kW emergency generator manufactured by Cummins/Onan. It is a four-stroke cycle, turbocharged, in-line, 6-cylinder, 166 HP, compression ignition, diesel engine with a total displacement of 5.9 liters. The date of Manufacture is 02/23/2005.* *The engine is subject to 40 CFR 63 Subpart ZZZZ National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines. In accordance with the definitions of this subpart, the engine is an existing, emergency, stationary RICE.*	62-210.300(3)(a)35., F.A.C.
009	Atlas Copco 49 HP Diesel Engine, Model No. XAS 185 This engine is for an air compressor. It is a 3-cylinder, 49 HP, compression ignition, diesel engine manufactured by Kubota (Model D1803-CR-TIE4B) with a total displacement of 1.8 liters. The date of Manufacture is 07/20/2012. The engine is subject to 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR 63 Subpart ZZZZ National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines. In accordance with the definitions of this subpart, the engine is new stationary Reciprocating Internal Combustion Engine (RICE). It is a non-emergency use engine. In accordance with 40 CFR 63.6590(c)(1), the engine must meet the requirements of 40 CFR 63 Subpart ZZZZ by complying with the 40 CFR 60 Subpart IIII standards. No further 40 CFR 63 Subpart ZZZZ standards shall apply to the engine	62-210.300(3)(a)35., F.A.C.

PROPOSED PROJECT.

The Chemours Company FC, LLC is requesting the reclassification of the facility to a Non-Title V Source.

FACILITY REGULATORY CLASSIFICATION

- The facility **is not** a major source of hazardous air pollutants (HAP).
- The facility **does not** operate units subject to the acid rain provisions of the Clean Air Act.
- The facility **is not** a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility **is not** a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality
- The facility **does** operate units subject to the NSPS of 40 CFR 60.
- The facility **does** operate units subject to the NESHAP of 40 CFR 63.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Northeast District Office, Permitting Program, of the Florida Department of Environmental Protection (Department). The Northeast District Office's mailing address is 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256. All documents related to applications for permits to operate an emissions unit shall be submitted to the Northeast District Office, Permitting Program. The Permitting Authority's telephone number is (904) 256-1700.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Northeast District Office, Compliance Assurance at: 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256. The Compliance Authority's telephone number is (904) 256-1700.

3. Appendices: The following Appendices are attached as part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); Appendix D (Common Testing Requirements); Appendix E (40 CFR 60, Subpart LL), and Appendix F (40 CFR 60 Subpart A General Provisions).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

   [Rule 62-210.300, F.A.C.]

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.

   [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification.

   [Rules 62-210.300(1) and 62-212.300(1) (a), F.A.C.]

7. Construction and Expiration. The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires.

   [Rules 62-4.070(3) & (4), 62-4.080 & 62-210.300(1), F.A.C.]

8. Application for Air Operating Permit: Subsequent to any construction, reconstruction or modification of a facility or emissions unit authorized by an air construction permit, and demonstration of compliance with the conditions of such air construction permit, the owner or operator of such facility or emissions unit shall obtain an initial air operation permit or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of this chapter and Chapter 62-4, F.A.C.

   [Rule 62-210.300(2), F.A.C.]

1. Unconfined Emissions of Particulate Matter: 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:

   a. paved roadways; application of water to unpaved roads.

   b. Landscaping or planting of vegetation

   c. Use of enclosures and windbreaks, where practical.

   In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice and the degree of reduction of emissions expected from a particular technique or practice.

   [Rule 62-296.320(4)(c), F.A.C.; Application No. 0190011-020-AC]

2. General Visible Emissions. Except for emissions units (and emissions points) that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions elsewhere in this permit, no person shall cause, let, permit, suffer, or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20% opacity). If a special compliance test is required, the test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.

   [Rule 62-296.320(4)(b)1., F.A.C.]

3. Single Facility Determination. The Department determined that the Twin Pines Minerals facility and the Chemours Trail Ridge Facility are a single, stationary source for the purposes of Title V Major Source and PSD applicability. The Twin Pines Minerals functions as a support facility as more than 50 percent of its raw material comes from the Chemours Trail Ridge facility. Both facilities are contiguous or adjacent, share the same SIC or NAICS code, but are not under common control.

   [Permit No. 0190011-019-AC and Permit No. 0190081-001-AC]

Subsection A: Emissions Unit 002 – Zircore Kiln

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
002	**Zircore Kiln.** A Ducon 185 VM Type Model 700 Cyclone is used for product recovery and the control of particulate emissions. *Capacity:* The Zircore Kiln operates at a maximum production rate of 4.5 tons per hour of dry heavy mineral sands. *Fuels:* Heat is provided by the burning of natural gas for a maximum heat input rate of 11 MMBtu per hour. *Stack Parameters:* Exhaust gases are emitted through a single vertical stack with a height of 40 feet and a diameter of 1.3 feet. The exit temperature is approximately 300 º F with a flow rate of 5000 actual cubic feet per minute (acfm).

PREVIOUS APPLICABLE REQUIREMENTS

1. Relation to Other Permits: The conditions of this permit supersede all other previously issued air construction permits for this emissions units.

   [Rules 62-4.030, and 62-210.300(1)(b), F.A.C.]

PERFORMANCE RESTRICTIONS

2. Permitted Capacity: The maximum production rate shall not exceed 4.5 tons per hour of dry Zircore heavy mineral sands.

   [Rule 62-210.200(PTE), F.A.C., Rule 62-4.160(2), F.A.C., Application No. 0190011-020-AC]

3. Permitted Capacity-Heat Input: The maximum heat input for this emissions unit shall not exceed 11 MMBtu per hour.

   [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., Application No. 0190011-020-AC]

4. Authorized Fuel: The Emissions Unit is authorized to fire natural gas only.

   [Rule 62-210.200(PTE), F.A.C., Application No. 0190011-020-AC]

5. Restricted Operation: The hours of operation of this emissions unit are not limited (8,760 hours per year).

   [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C., Application No. 0190011-020-AC]

EMISSIONS STANDARDS

{Permitting Note: Unless otherwise specified, the averaging times for the Specific Condition is based on the specified averaging time of the applicable test method.}

6. Visible Emissions Standard: The emission unit shall meet the General Visible Emissions Standard stated in **Facility Wide Condition 2**.

   [Rule 62-4.070, F.A.C. - Reasonable Assurance]

7. Sulfur Dioxide Emissions: Sulfur dioxide emissions are controlled by the firing of natural gas.

   [Rule 62-4.070, F.A.C. - Reasonable Assurance]

TESTING REQUIREMENTS

8. Visible Emissions: The Emissions Unit shall be tested to demonstrate compliance with emissions standard for Visible Emissions upon Department request.

   [Rule 62-4.070, F.A.C. - Reasonable Assurance]

9. Special Compliance Tests: When the Department, 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 a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

   [Rule 62-297.310(8)(c), F.A.C.]

10. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.

    [Rule 62-297.310(9), F.A.C.]

11. Test Methods: Required tests shall be performed in accordance with the following reference methods.

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

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

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

RECORDS AND REPORTS

12. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit.

    [Rule 62-297.310(10), F.A.C., Rule 62-204.800(8)(d), F.A.C.]

13. Operational Data: A record of operational data shall be maintained at the facility, and made available during inspection if requested. The record shall include the following minimum data:

    - Hours of Operation (each month total for a combined yearly total of hours/year),
    - Yearly process input rate (each month total for a combined yearly total of tons/year),
    - Natural gas usage (each month total for a combined yearly total of MMCF/year).

    [Rule 62-4.070, F.A.C. - Reasonable Assurance]

Subsection B: Emissions Unit 003 – Zircon Kiln

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
003	**Zircon Kiln.** A Ducon Type VM Model 700/150 Cyclone is used for product recovery and the control of particulate emissions. *Capacity:* The Zircon Kiln operates at a maximum production rate of 18.0 tons per hour of dry Zircon concentrate. *Fuels:* Heat is provided by the burning of natural gas for a maximum heat input rate of 23 MMBtu per hour. *Stack Parameters:* Exhaust gases are emitted through a single verticle stack with a height of 40 feet and a diameter of 2.0 feet. The exit temperature is approximately 270 º F with a flow rate of 20,700 actual cubic feet per minute (acfm).

PREVIOUS APPLICABLE REQUIREMENTS

1. Relation to Other Permits: The conditions of this permit supersede all other previously issued air construction permits for this emissions units.

   [Rules 62-4.030, and 62-210.300(1)(b), F.A.C.]

PERFORMANCE RESTRICTIONS

2. Permitted Capacity: The maximum production rate shall not exceed 18.0 tons per hour of dry Zircon concentrate.

   [Rule 62-210.200(PTE), F.A.C., Rule 62-4.160(2), F.A.C., Application No. 0190011-020-AC]

3. Permitted Capacity-Heat Input: The maximum heat input for this emissions unit shall not exceed 23 MMBtu per hour.

   [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., Application No. 0190011-020-AC]

4. Authorized Fuel: The Emissions Unit is authorized to fire natural gas only.

   [Rule 62-210.200(PTE), F.A.C., Application No. 0190011-020-AC]

5. Restricted Operation: The hours of operation of this emissions unit are not limited (8,760 hours per year).

   [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C., Application No. 0190011-020-AC]

EMISSIONS STANDARDS

{Permitting Note: Unless otherwise specified, the averaging times for the Specific Condition is based on the specified averaging time of the applicable test method.}

6. Visible Emissions Standard: The emission unit shall meet the General Visible Emissions Standard stated in **Facility Wide Condition 2**.

   [Rule 62-4.070, F.A.C. - Reasonable Assurance]

7. Sulfur Dioxide Emissions: Sulfur dioxide emissions are controlled by the firing of natural gas.

   [Rule 62-4.070, F.A.C. - Reasonable Assurance]

TESTING REQUIREMENTS

8. Visible Emissions: The Emissions Unit shall be tested to demonstrate compliance with emissions standard for Visible Emissions upon Department request.

   [Rule 62-4.070, F.A.C. - Reasonable Assurance]

9. Special Compliance Tests: When the Department, 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 a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

   [Rule 62-297.310(8)(c), F.A.C.]

10. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.

    [Rule 62-297.310(9), F.A.C.]

11. Test Methods: Required tests shall be performed in accordance with the following reference methods.

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

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

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

RECORDS AND REPORTS

12. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit.

    [Rule 62-297.310(10), F.A.C., Rule 62-204.800(8)(d), F.A.C.]

13. Operational Data: A record of operational data shall be maintained at the facility, and made available during inspection if requested. The record shall include the following minimum data:
    - Hours of Operation (each month total for a combined yearly total of hours/year),
    - Yearly process input rate (each month total for a combined yearly total of tons/year),
    - Natural gas usage (each month total for a combined yearly total of MMCF/year).

    [Rule 62-4.070, F.A.C. - Reasonable Assurance]

Subsection C: Emissions Unit 004 – Ilmenite Dryer No. 2

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
004	**Ilmenite Dryer No. 2** *Capacity:* The Ilmenite Dryer No. 2 operates at a maximum production rate of 70.0 tons per hour of heavy mineral sands. *Fuels:* Heat is provided by the burning of natural gas for a maximum heat input rate of 23 MMBtu per hour. *Controls:* A baghouse is used for Particulate Matter emission control. *Stack Parameters:* Exhaust gases are emitted through a single vertical stack with a height of 33 feet and a diameter of 2.0 feet. The exit temperature is approximately 240 º F with a flow rate of 25,100 actual cubic feet per minute (acfm).

PREVIOUS APPLICABLE REQUIREMENTS

1. Relation to Other Permits: The conditions of this permit supersede all other previously issued air construction permits for this emissions units.

   [Rules 62-4.030, and 62-210.300(1)(b), F.A.C.]

PERFORMANCE RESTRICTIONS

2. Permitted Capacity: The maximum production rate shall not exceed 70.0 tons per hour of heavy mineral sands.

   [Rule 62-210.200(PTE), F.A.C., Rule 62-4.160(2), F.A.C., Application No. 0190011-020-AC]

3. Permitted Capacity-Heat Input: The maximum heat input for this emissions unit shall not exceed 23 MMBtu per hour.

   [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., Application No. 0190011-020-AC]

4. Authorized Fuel: The Emissions Unit is authorized to fire natural gas only.

   [Rule 62-210.200(PTE), F.A.C., Application No. 0190011-020-AC]

5. Restricted Operation: The hours of operation of this emissions unit are not limited (8,760 hours per year).

   [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C., Application No. 0190011-020-AC]

6. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly.

   [Rule 62-210.650, F.A.C.]

EMISSIONS STANDARDS

{Permitting Note: Unless otherwise specified, the averaging times for the Specific Condition is based on the specified averaging time of the applicable test method.}

7. Particulate Matter Emissions: Particulate Matter emissions shall not exceed 4.4 pounds per hour and 19.2 tons per year.

   {Permitting Note: Particulate Matter limits are based on stack test data provided in Application No. AC10-219184}

   [Application No. 0190011-020-AC]

8. Visible Emissions Standard: Visible emissions shall not exceed 5 percent opacity.

   [Rule 62-297.620(4), F.A.C., Application No. 0190011-020-AC]

9. Sulfur Dioxide Emissions: Sulfur dioxide emissions are controlled by the firing of natural gas.

   [Rule 62-4.070, F.A.C. - Reasonable Assurance]

TESTING REQUIREMENTS

10. Visible Emissions: During each calendar year (January 1st to December 31st), the Emission Unit shall be tested to demonstrate compliance with the emissions standards for Visible Emissions.

    [Rule 62-297.310(8)(a)1, F.A.C.]

11. Particulate Matter Emissions: The Emissions unit shall be considered to be in compliance with the Particulate Matter emissions standard stated in **Specific Condition 7.** if the Emissions Unit is in compliance with the Visible Emissions standard stated in **Specific Condition 8.** The Emissions Unit shall be tested to demonstrate compliance with emissions standard for Particulate Matter Emissions upon Department request in accordance with the requirements of **Specific Condition 14.**

    [Rule 62-297.310(8)(c), F.A.C., Rule 62-4.070, F.A.C. - Reasonable Assurance]

12. Special Compliance Tests: When the Department, 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 a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

    [Rule 62-297.310(8)(c), F.A.C.]

13. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.

    [Rule 62-297.310(9), F.A.C.]

14. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Method for Determining Particulate Matter Emissions
9	Visual Determination of the Opacity of Emissions from Stationary Sources

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

[Rules 62-204.800, F.A.C.; 62-296.320(4)(b)4.a., F.A.C., and Appendix A of 40 CFR 60]

RECORDS AND REPORTS

15. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit.

[Rule 62-297.310(10), F.A.C., Rule 62-204.800(8)(d), F.A.C.]

16. Operational Data: A record of operational data shall be maintained at the facility, and made available during inspection if requested. The record shall include the following minimum data:

- Hours of Operation (each month total for a combined yearly total of hours/year),
- Yearly process input rate (each month total for a combined yearly total of tons/year),
- Natural gas usage (each month total for a combined yearly total of MMCF/year).

[Rule 62-4.070, F.A.C. - Reasonable Assurance]

Subsection D: Emissions Unit 005 – Product Handling and Transfer Operations subject to 40 CFR 60 Subpart LL

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
005	**Product Handling and Transfer Operations** *Capacity:* Various sources of fugitive emissions operate at a rate necessary to maintain a maximum production rate of 70.0 tons per hour of dried Ilmenite ore.

EP	Description	EP	Description	EP	Description
01	Zircon #1 Screen	025	Ilmenite #11 Elevator	049	Ilmenite #10 Conveyor
02	Zircon #2 Screen	026	Ilmenite #15 Elevator	050	Ilmenite #12 Conveyor
03	Ilmenite #1 Screen	027	Ilmenite #16 Elevator	051	Ilmenite #13 Conveyor
04	Ilmenite #2 Screen	028	Zircon #4 Conveyor	052	Ilmenite #27 Conveyor
05	Ilmenite #3 Screen	029	Zircon #5 Conveyor	053	Ilmenite #29 Conveyor
06	Ilmenite #4 Screen	030	Zircon #6 Conveyor	054	Zircon #1 Bagging Operation
07	Ilmenite #5 Screen	031	Zircon #7 Conveyor	055	Zircore #1 Bagging Operation
08	Ilmenite #6 Screen	032	Zircon #8 Conveyor	056	Zircon #1 Bin
09	Ilmenite #7 Screen	033	Zircon #9 Conveyor	057	Zircon #2 Bin
010	Zircon #2 Elevator	034	Zircon #10 Conveyor	058	Zircon #7 Bin
011	Zircon #4 Elevator	035	Zircon #11 Conveyor	059	Zircon #9 Bin
012	Zircon #6 Elevator	036	Zircon #12 Conveyor	060	Zircon #10 Bin
013	Zircon #7 Elevator	037	Zircon #13 Conveyor	061	Zircon #11 Bin
014	Zircon #8 Elevator	038	Zircon #14 Conveyor	062	Zircon #12 Bin
015	Zircon #9 Elevator	039	Zircon #15 Conveyor	063	Zircon #13 Bin
016	Zircon #10 Elevator	040	Zircon #16 Conveyor	064	Zircon #14 Bin
017	Zircon #11 Elevator	041	Ilmenite #1 Conveyor	065	Zircon #16 Bin
018	Zircon #12 Elevator	042	Ilmenite #2 Conveyor	066	Zircon #17 Bin
019	Zircon #13 Elevator	043	Ilmenite # 3 Conveyor	067	Zircon #18 Bin
020	Ilmenite #1Elevator	044	Ilmenite #4 Conveyor	068	Zircon #19 Bin
021	Ilmenite #2 Elevator	045	Ilmenite #5 Conveyor	069	Zircore #4 Bin
022	Ilmenite #3 Elevator	046	Ilmenite #6 Conveyor	070	Zircore #7 Bin
023	Ilmenite #4 Elevator	047	Ilmenite #7 Conveyor		
024	Ilmenite #9 Elevator	048	Ilmenite #8 Conveyor		

{The Emissions Unit and identified Emission Points are regulated under NSPS - 40 CFR 60, Subpart LL, Standards of Performance for Metallic Mineral Processing Plants, adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

{Permitting Note: Emissions Points 04, 05, 06, 07, 08, 09, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 022, 023, 024, 025, 026, 027, 032, 033, 034, 035, 036, 037, 038, 039, 040, 043, 044, 045, 046, 047, 048, 049, 050, 051, 054, 055, 058, 059, 060, 061, 062, 063, 064, 065, 066, 067, 068, and 069 are vented indoors.}

PREVIOUS APPLICABLE REQUIREMENTS

1. Relation to Other Permits: The conditions of this permit supersede all other previously issued air construction permits for this emissions units.

   [Rules 62-4.030, and 62-210.300(1)(b), F.A.C.]

PERFORMANCE RESTRICTIONS

2. Permitted Capacity: The maximum operating rate of this Emissions Unit shall be the rate necessary to maintain a facility production rate not exceed 70.0 tons per hour of dried Ilmenite ore.

   [Rule 62-210.200(PTE), F.A.C., Rule 62-4.160(2), F.A.C., Application No. 0190011-020-AC]

3. Restricted Operation: The hours of operation of this emissions unit are not limited (8,760 hours per year).

   [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C., Application No. 0190011-020-AC]

4. NSPS Subpart LL Requirements: Each crusher, screen, bucket elevator, conveyor belt transfer point, thermal dryer, product packaging station, storage bin, enclosed storage area, truck loading station, truck unloading station, railcar loading station, and railcar unloading station at the mill or concentrator as defined by 40 CFR 60 Subpart LL, shall comply with all of the applicable requirements of 40 CFR 60, Subpart LL, attached in Appendix E of this permit.

   [40 CFR 60.380(a), (b), Rule 62-204.800(8)(b)44., F.A.C.]

5. NSPS Subpart A Requirements: The Emissions Unit and Emission Points shall comply with all of the applicable requirements of 40 CFR 60, Subpart A- General Provisions, attached in Appendix F of this permit.

   [40 CFR 60.1, Rule 62-204.800(8)(d), F.A.C.]

EMISSIONS STANDARDS

{Permitting Note: Unless otherwise specified, the averaging times for the Specific Condition is based on the specified averaging time of the applicable test method.}

6. Particulate Matter Emissions: Process fugitive emissions that exhibit greater than 10% opacity shall not be discharged into the atmosphere from the Emissions Unit and each Emissions Point.

   [40 CFR 60.382(b), Rule 62-204.800(8)(b)44., F.A.C.]

TESTING REQUIREMENTS

7. Particulate Matter Emissions: During each calendar year (January 1st to December 31st), the Emission Unit and each Emissions Point shall be tested to demonstrate compliance with the emissions standards for Particulate Matter.

   [Rule 62-297.310(8)(a)1, F.A.C.]

8. Test Method: EPA Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from process fugitive emissions. The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected emissions unit being observed. A single visible emission observer may conduct visible emission observations for up to three stack, or vent emission points within a 15-second interval. This option is subject to the following limitations:

   i. No more than three emission points are read concurrently;

   ii. All three emission points must be within a 70° viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points; and

iii. If an opacity reading for any one of the three emission points is within 5 percent opacity of the application standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C., except as provided in 40 CFR 60.8(b). No other methods may be used unless prior written approval is received from the Department

[40 CFR 60.386(a), (b)(2), Rule 62-204.800(8)(b)44., F.A.C, Rule 62-204.800(8)(e), F.A.C., and Appendix A of 40 CFR 60]

9. Annual EPA Method 9 Compliance Test Duration: The required minimum period of observation for each of the annual visible emissions compliance tests shall be 30 minutes except that for batch, cyclical processes, or other operations that are typically completed within less than the minimum observation period, the period of observation shall include each occurrence of the operation during the minimum observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

   [Rule 62-297.310(5)(b), F.A.C.]

10. Test Method Alternative: EPA Method 22 may be used as an alternative test method to EPA Method 9 required in **Specific Condition 8.** for each of those Emissions Points identified within this permit as being subject to 40 CFR 60 Subpart LL and venting indoors. The EPA Method 22 test shall be performed on the exterior of the building in which the identified Emissions Point is located while the Emissions Point is in operation. The total observation time for each EPA Method 22 test shall be 75 minutes (15 minutes for each side of the building and 15 minutes for the roof).

    Provided no (zero) visible emissions are observed during the EPA Method 22 test, the EPA Method 9 test stated in **Specific Condition 8.** shall not be required for the Emissions Point.

    If visible emissions are detected during the EPA Method 22 observation period, the Permittee shall conduct a visible emissions test using EPA Method 9 as stated in **Specific Condition 8.** on the Emissions Point located inside the building.

    The required minimum total time of observation for each of the initial compliance tests shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

    The required minimum total time of observation for each of the annual compliance tests shall be 30 minutes as stated in **Specific Condition 9.**

    [40 CFR 60.8(b), 40 CFR 60.11(b), Rule 62-204.800(8)(d), F.A.C., EPA Applicability Determination dated October 26, 2006]

11. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.

    [Rule 62-297.310(9), F.A.C.]

RECORDS AND REPORTS

12. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit.

    [Rule 62-297.310(10), F.A.C., Rule 62-204.800(8)(d), F.A.C., 40 CFR 60.11(e)(2)]

Subsection E: Emissions Unit 010 – Independent Rail Loadout System

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
010	**Independent Rail Loadout System** *Description:* Railcar loadout conveyor system that is independently operated. Material processed by the Trail Ridge facility and that processed by the Twin Pines Minerals facility is dropped by truck or front-end loader into the hopper. From the hopper the material slides onto transfer Conveyor 1. From Conveyor 1, the material transfers to a second conveyor, Conveyor 2. From Conveyor 2, the material transfers through a drop chute into railcars. The conveyors are electric. The material may be placed in open piles, in the vicinity of the conveyor system, prior to shipping. *Capacity:* The rail loadout conveyor system is limited to no more than 300,000 tons per year of mineral sands. **EP ID** — **Emission Point Description** 01 — Truck unloading into Hopper 02 — Hopper 03 — Conveyor belt transfer point from Hopper to Conveyor 1 04 — Conveyor belt transfer point from Conveyor 1 to Conveyor 2 05 — Conveyor belt transfer point from Conveyor 2 to Railcar

{This emissions unit is regulated under NSPS - 40 CFR 60, Subpart LL, Standards of Performance for Metallic Mineral Processing Plants, adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

PREVIOUS APPLICABLE REQUIREMENTS

1. Relation to Other Permits: The conditions of this permit supersede all other previously issued air construction permits for this emissions units.

   [Rules 62-4.030, and 62-210.300(1)(b), F.A.C.]

PERFORMANCE RESTRICTIONS

2. Permitted Capacity: The maximum process rate is estimated to be 100 tons per hour and shall not exceed 300,000 tons per year of mineral sands.

   [Rule 62-210.200(PTE), F.A.C., Rule 62-4.160(2), F.A.C., Application No. 0190011-020-AC, Application No. 019011-022-AC]

3. Authorized Fuels: The conveyors (Conveyor 1 and Conveyor 2) shall be electric and not powered by fuel (diesel, natural gas, fuel oil, or propane).

   [Rules 62-4.070(3), F.A.C.; Rule 62-210.200(PTE), F.A.C., Rule 62-4.160(2), F.A.C., Application No. 0190011-020-AC, Application No. 019011-022-AC]

4. Restricted Operation: The hours of operation of the Emissions Unit and each Emissions Point are not limited (8,760 hours per year).

   [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

5. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly.

   [Rule 62-210.650, F.A.C.]

6. Minimizing Emissions: At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the affect emission points including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

   [40 CFR 60.11(d), Rule 62-204.800(8)(b)44., F.A.C.]

7. NSPS Subpart LL Requirements: Each conveyor belt transfer point, storage bin, truck loading station, and railcar loading station shall comply with all of the applicable requirements of 40 CFR 60, Subpart LL, attached in Appendix E of this permit.

   Conveyor belt transfer point means a point in the conveying operation where the metallic mineral or metallic mineral concentrate is transferred to or from a conveyor belt except where the metallic mineral is being transferred to a stockpile

   Storage bin means a facility for storage (including surge bins and hoppers) of metallic minerals prior to further processing or loading.

   Truck unloading station means that portion of a metallic mineral processing plant where metallic ore is unloaded from a truck into a hopper, screen, or crusher.

   Railcar loading station means that portion of a metallic mineral processing plant where metallic minerals or metallic mineral concentrates are loaded by a conveying system into railcars.

   [40 CFR 60.380(a),(b), 40 CFR 60.381, Rule 62-204.800(8)(b)44., F.A.C., Application No. 0190011-020-AC, Application No. 019011-022-AC]

8. NSPS Subpart A Requirements: This emissions unit shall comply with all of the applicable requirements of 40 CFR 60, Subpart A- General Provisions, attached in Appendix F of this permit.

   [40 CFR 60.1, Rule 62-204.800(8)(d), F.A.C., Application No. 0190011-020-AC, Application No. 019011-022-AC]

EMISSIONS STANDARDS

{Permitting Note: Unless otherwise specified, the averaging times for the Specific Condition is based on the specified averaging time of the applicable test method.}

9. Particulate Matter Emissions- EPs 01-05: Process fugitive emissions that exhibit greater than 10% opacity shall not be discharged into the atmosphere from these emissions points.

   [40 CFR 60.382(b), Rule 62-204.800(8)(b)44., F.A.C., Application No. 0190011-020-AC, Application No. 019011-022-AC]

TESTING REQUIREMENTS

10. Annual Compliance Tests- EPs 01-05: During each calendar year (January 1st to December 31st), each of the Emission Points EPs 01-05 shall be tested to demonstrate compliance with the emissions standards for Particulate Matter.

    [Rule 62-297.310(8)(a)1, F.A.C.]

11. Test Method- EPs 01-05: EPA Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from process fugitive emissions. The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected emissions unit being observed. A single visible emission observer may conduct visible emission observations for up to three stack, or vent emission points within a 15-second interval. This option is subject to the following limitations:

    i. No more than three emission points are read concurrently;

    ii. All three emission points must be within a 70° viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points; and

    iii. If an opacity reading for any one of the three emission points is within 5 percent opacity of the application standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

    The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C., except as provided in 40 CFR 60.8(b). No other methods may be used unless prior written approval is received from the Department

    [40 CFR 60.386(a),(b)(2), Rule 62-204.800(8)(b)44., F.A.C, Rule 62-204.800(8)(e), F.A.C and Appendix A of 40 CFR 60]

12. Annual Compliance Tests Duration- EPs 01-05: The required minimum period of observation for each of the annual visible emissions compliance tests shall be 30 minutes except that for batch, cyclical processes, or other operations that are typically completed within less than the minimum observation period, the period of observation shall include each occurrence of the operation during the minimum observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

    [Rule 62-297.310(5)(b), F.A.C.]

13. Test Requirements- EPs 01-05: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.

    [Rule 62-297.310(9), F.A.C.]

RECORDS AND REPORTS

14. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit.

    [Rule 62-297.310(10), F.A.C., Rule 62-204.800(8)(d), F.A.C., 40 CFR 60.11(e)(2)]

15. Operational Data: The permittee shall maintain a record of the quantity of material/processed mineral sands loaded (each month for an annual total of tons per year). This operational data shall be made available during inspection by the Compliance Authority upon request.

    [Rule 62-4.070(3), F.A.C., Application No. 0190011-020-AC, Application No. 019011-022-AC]