E.I. Dupont De Nemours & Co.
E.I. Dupont De Nemours & Co.-Highland

Facility ID No.: 0070001
Bradford County

Title V Air Operation Permit Renewal

Permit No. 0070001-008-AV
Renewal of Title V Air Operation Permit No. 0070001-007-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Waste and Air Resource Management Program, Northeast District

8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256
Telephone: 904/256-1700
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Compliance Authority:

State of Florida
Department of Environmental Protection
Compliance Assurance, Northeast District

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Title V Air Operation Permit Renewal
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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHEAST DISTRICT
8800 BAYMEADOWS WAY WEST, SUITE 100
JACKSONVILLE, FLORIDA 32256

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

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SECRETARY

Permittee:
E.I. Dupont De Nemours & Co.
Post Office Box 753
Starke, Florida 32091

Draft/Proposed Permit No.: 0070001-008-AV
Facility ID No.: 0070001
SIC Nos.: 10, 1099
Project: Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing Metallic Mineral Processing Facility is located in Bradford County 1.2 miles east of U.S. Highway 301 on SR 125, north of Lawtey Bradford County; UTM Coordinates: Zone 17, 398.70 km East and 3325.00 km North; Latitude: 30° 03' 12" North and Longitude: 82° 03' 04" West.

This Title V Air Operation Permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date: DATE, 20xx
Renewal Application Due Date: Exp. DATE -225, 20xx
Expiration Date: Eff. DATE + 5 years, 20xx

Draft/Proposed

_____

Richard S. Rachal III, P.G.
Program Administrator
Waste and Air Resource Management Program

RSR/yke

Subsection A. Facility Description

This facility mines and processes heavy mineral sand (Ilmenite, Zircon, Staurolite). The facility contains a fuel oil fired rotary dryer, dry cyclone, a feed system, and a load-out system.

Feed to the rotary dryer comes from the stockpile of scrubbed wet mill concentrate via the hopper, bin loading belt conveyor, disk feeder bin and the dryer feed belt conveyor. The dried heavy mineral sands are discharged onto a conveyor and taken in to the dry processing facility. The dry cyclone is used for product recovery. The cyclone undersize is then wet to control fugitive emissions and returned to a wet settling pond.

The dried mineral sands are sent to other plants for processing to titanium dioxide.
The heavy mineral sand is not milled for size reduction in any of the processes and is only physically separated from the quartz sands by gravity prior to introduction to the rotary dryer.

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

Ilmenite Dryer. This emissions unit consists of a rotary dryer with a maximum process rate of 76.16 tons per hour of dry mineral sand and a maximum heat input rate of 22.0 MMBtu per hour. Heat is provided by the burning of either No. 6 fuel oil, On-spec used oil, No. 4 fuel oil or No. 5 fuel oil. A cyclone is used for product recovery and exhaust gases are emitted through a single vertical stack.

Product Handling and Transfer Operations Fugitive Emissions. This emissions unit consists of various screens, bucket elevators, storage bins, belt conveyors, and a loading station.

Portable Screening System. This is a screening system (manufacturer: McCloskey International, Model: MCB-516RE) that consists of a Caterpillar (95 KW, 2200 rpm) non road diesel engine, feed hopper, screener and multiple conveyor belts. The screener is used to reclaim metallic minerals from previously processed material. The ore piles are in the open and have a significant amount of moisture. A mobile excavator is used to pick up the material and drops it into the screen hopper. The open screen separates the material and has an integral belt conveyor that drops the material into a truck for load out. A similar conveyor drops the oversize material onto another material pile.

Internal Combustion Engine
One Caterpillar (95 KW, 2200 rpm) non-emergency use diesel engine for the portable screening system.
The engine was built on June 15, 2006, and is certified by manufacturer according to 40 CFR part 89 or 40 CFR part 94, and meets the emissions standards of 40 CFR 60.4204 (a).

Also included in this permit are miscellaneous unregulated and insignificant emissions units and/or activities.

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Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions.

E.U. ID No	Emissions Unit Brief Description
001	Ilmenite Dryer
002	Product Handling and Transfer Operations Fugitive Emissions
003	Portable Screening System
004	Internal Combustion Engine for E.U. 003
xxx*	*See Appendix U-1, List of Unregulated Emissions Units and Activities

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). On all correspondence, test report submittals, applications, etc.

Subsection C. Applicable Regulations

Based on the Title V air operation permit renewal application received March 25, 2014, this facility **is not** a major source of hazardous air pollutants (HAP). The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. due to the potential SO_2 emissions being above 250 TPY. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
40 CFR 60, Subpart A, NSPS General Provisions	002, 003, 004
40 CFR 60, Subpart LL	002, 003
40 CFR 60, Subpart IIII	004
40 CFR 63, Subpart ZZZZ	004
40 CFR 63, Subpart A, NESHAP General Provisions	004
State Rule Citations Rule 62-296.320(4), F.A.C., Rule 62-297.310(5)	001, 002, 002, 004

SECTION II. FACILITY-WIDE CONDITIONS.

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated.

[Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. **Not federally Enforceable.** Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.

[Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. .

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

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement.

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

FW5. Unconfined 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.

[Rule 62-296.320(4)(c)2., F.A.C.; Construction Permit No. . 0070001-004-AC]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee

Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

FW7. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]

FW8. Prevention of Accidental Releases (Section 112(r) of CAA).

a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.
d. Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to: Department of Community Affairs, Division of Emergency Management, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2100, Telephone: (850) 413-9921, Fax: (850) 488-1739.
e. Any Risk Management Plans, original submittals, revisions, or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.
f. Any required reports to be sent to the National Response Center, should be sent to: National Response Center, EPA Office of Solid Waste and Emergency Response, USEPA (5305 W), 401 M Street SW, Washington, D.C. 20460, Telephone: (800) 424-8802.

g. Send the required annual registration fee using approved forms made payable to: Cashier, Department of Community Affairs, State Emergency Response Commission, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

FW.9. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]

FW.10. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit.

E.U. ID No.	Brief Description of Emissions Unit
001	Ilmenite Dryer with Cyclone for Product Recovery

The Ilmenite Dryer operates at a maximum production rate of 76.16 tons per hour of heavy mineral sands. Heat is primarily provided by the burning of 150 gallons per hour of No. 6 fuel oil for a maximum heat input rate of 22.0 MMBtu per hour.

The following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity: The maximum heat input rate for this emissions unit shall not exceed 22.0 MMBtu per hour.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC04-146205 & 0070001-004-AC]

A.2. Permitted Capacity: The maximum production rate shall be 76.16 tons per hour of dried Ilmenite ore.

[Rules 62-4.160(2) and 62-210.200, (PTE), F.A.C.]

A.3. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year.

[Rules 62-4.160(2) and 62-210.200, (PTE), F.A.C.]

A.4. Methods of Operation - (i.e. Fuels): The maximum heat input shall be attained using a maximum of either 150 gallons per hour of No. 6 fuel oil with a maximum sulfur content of 2.8% by weight or 170 gallons per hour of on-spec used oil with a maximum sulfur content of 1% by weight. Nos. 4 & 5 fuel oil may also be used in place of No. 6 fuel oil provided that the 22.0 MMBtu per hour heat input limit is not exceeded.

[Rule 62-213.410, F.A.C., Construction Permit No. AC04-146205, Construction Permit No. 0070001-004-AC]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

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

A.5 **Visible Emissions:** Visible emissions shall not exceed 20 percent opacity based on a six-minute average.

[Construction Permit No. AC04-146205, Construction Permit No. 0070001-004-AC]

A.6 **Sulfur Dioxide.** Sulfur dioxide emissions shall be subject to the limit established by the fuel oil sulfur content limit in **Specific Condition No. A.4.**

[Construction Permit No. 0070001-004-AC]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.7 **Visible Emissions:** The test method for visible emissions shall be EPA Method 9. Compliance testing shall be performed at least once each federal fiscal year.

[Rule 62-296.320(4)(b)4.a., F.A.C., Rule 62-297.401, F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Construction Permit 0070001-004-AC]

A.8 **Sulfur Dioxide:** In lieu of stack testing, determine and record the as-fired fuel sulfur content for liquid fuels using ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91 to analyze a representative sample of the fuel following each fuel delivery. A copy of a certified ASTM fuel oil analysis of the oil delivered is acceptable.

[Rules 62-213.440 and 62-297.440, F.A.C., Construction Permit No. 0070001-004-AC]

Monitoring Requirements

A.9 **Fuel Flow:** The owner or operator shall calibrate, maintain, and operate a monitoring device for the fuel oil usage. The fuel flow meter shall meet an accuracy of ±10%. Calibrations shall be performed at least annually.

[Rule 62-297.310(5), F.A.C.; Permit No. 0070001-004-AC]

Recordkeeping and Reporting

A.10 **Recordkeeping:** A record of operational data for this emissions unit shall be maintained at the facility. A report of this data shall be submitted to the Department with the Annual Operating Report. The report shall include the following minimum data:

- Hours of Operation
- Daily process input rate (tons/hr.)
- Daily fuel usage of No. 6 fuel oil (gal/hr.)
- Daily fuel usage of on-spec used oil (gal/hr.)
- Daily fuel usage of No. 4 fuel oil (gal/hr.)
- Daily fuel usage of No. 5 fuel oil (gal/hr.)

Specific Condition A.10 continued:

- Oil delivery record for each fuel oil type including:
  - Date of Delivery
  - Gallons of fuel delivered
  - Fuel oil analysis including heat content in BTU per gallon, density in pounds per gallon, sulfur content in percent by weight, and the name of the test method. (A certified analysis supplied by the vendor is acceptable)

[Rules 62-4.070(3) and 62-213.440, F.A.C.; Construction Permit No. AC04-146205, Construction Permit No. 0070001-004-AC]

A.11 **Fuel Flow Meter Calibration Data.** The calibration data shall be submitted along with the Annual Operating Report.

[Permit No. 0070001-004-AC]

On- Spec Used Oil Specifications

A.12 The on-spec used oil prior to blending shall comply with the specifications stated below, and the provisions of 40 CFR 279 & 761. Used oil, which does not meet any of these specification levels, is considered "off-specification" used oil and shall not be burned:

Constituent/property	Allowable level
Arsenic	5 ppm maximum.
Cadmium	2 ppm maximum.
Chromium	10 ppm maximum.
Lead	100 ppm maximum.
Flash point	100 °F minimum.
Total halogens	4,000 ppm maximum.[2]
Note: Applicable standards for the burning of used oil containing PCBs are imposed by 40 CFR 761.20(e).	

[1]The allowable levels do not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste (see §279.10(b)).

[2]Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under §279.10(b)(1). Such used oil is subject to subpart H of part 266 of this chapter rather than this part when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

[40 CFR 279.11; Permit No. 0070001-004-AC]

A.13 <u>PCBs:</u> On-specification used oil may be fired as follows:

1. At any time provided the maximum concentration of PCBs is less than 2 ppm regardless of whether it is generated on or off-site. The analysis and recordkeeping requirements apply to each amount of used oil, prior to blending, even if to be blended with 90% virgin oil.

2. Only during normal operation temperature and not during startup or shutdown, if the maximum concentration of PCBs is greater than or equal to 2 ppm, but less than 50 ppm.

[40 CFR 279.61 and 761.20(e); Permit No. 0070001-004-AC]

A.14 <u>Recordkeeping.</u> Approved EPA, DEP, or ASTM test methods shall be used or a certified on-specification used oil analysis shall be obtained prior to blending and shall be retained for inspection or submitted to the Department upon request.

[Permit No. 0070001-004-AC]

Subsection B. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description of Emissions Unit
002	Product Handling and Transfer Operations- Fugitive Emissions
E. pt. No.	**Brief Description of Emissions Point**
01 - 06	# 1 Screen - # 6 Screens
07	# 1A Elevator
08 - 010	# 15 #16 & # 17 Elevators
011 - 012	# 1 & # 2 Belt Conveyors
013	# 31 Belt Conveyor
014 -015	# 1 & # 2 Storage Bins
016	# 4 Loading Station

The Processing Plant operates various sources of NSPS fugitive emissions at a rate necessary to maintain a maximum production rate of 76.16 tons per hour of dried Ilmenite ore.

Permitting note(s): The identified emissions 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.}

The following conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Capacity: The maximum production rate shall be 76.16 tons per hour of dried Ilmenite ore.

[Rules 62-4.160(2) and 62-210.200, (PTE), F.A.C.]

B.2. Hours of Operation: This emissions unit may operate continuously, i.e., 8,760 hours/year.

[Rules 62-4.160(2) and 62-210.200, (PTE), F.A.C.]

Emissions Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.3. Particulate Matter: Process fugitive emissions that exhibit greater than 10% opacity shall not be discharged into the atmosphere from each of the emissions point.

[40 CFR 60.382(b)]

Test Method and Procedures

Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

B.4. Opacity: EPA Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from stack emissions and process fugitive emissions. The duration of the test shall be at least 30 minutes.

The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected facility being observed. A single visible emission observer may conduct visible emission observations for up to three fugitive, 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.

[40 CFR 60.386(b)(2);.62-297.310 (4)(a)2, F.A.C.]

B.5. Compliance Testing Frequency: A compliance test shall be performed once each federal fiscal year. [Note]

Note: Emissions Points 01, 02, 03, 04, 06, 07, 08, 09, 010, and 013 are vented indoors and opacity testing may be required. DEP reserves the right to require the modification of construction and operation permits to accommodate testing requirements based on the EPA 04/04/2003, letter and any additional instruction from EPA and /or the Division of Air. If such determination is made, the permittee will be required to submit all necessary permit applications and publish required "Public Notices".

[40 CFR 60.386(b)(2); Rule 62-297.310(7)(a)4.a., F.A.C.]

B.6. This emissions unit is also subject to the applicable requirements of 40 CFR 60 Subpart A, General Provisions.

Subsection C. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description of Emissions Unit
003	Portable Screening System
E. pt. No.	**Brief Description of Emissions Point**
01	Feed Hopper
02	Screener
03	Transfer point from screen to reject belt
04	Transfer point from under belt to discharge belt

This is a screening system (manufacturer: McCloskey International, Model: MCB-516RE) that consists of a Caterpillar (95 KW, 2200 rpm) non-emergency use diesel engine, feed hopper, screener and multiple conveyor belts. The screener is used to reclaim metallic minerals from previously processed material. The ore piles are in the open and have a significant amount of moisture. A mobile excavator is used to pick up the material and drops it into the screen hopper. The open screen separates the material and has an integral belt conveyor that drops the material into a truck for load out. A similar conveyor drops the oversize material onto another material pile.

The unit is subject to:

- New Source Performance Standards (NSPS), Subpart LL - Standards of Performance for Metallic Mineral Processing Plants, adopted and incorporated by reference in Rule 62-204.800, F.A.C.

The following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

C.1. **Hours of Operation:** The hours of operation are not restricted.

[Rules 62-4.160(2), 62-210.200(PTE), F.A.C.]

C.2. **Maximum Throughput Rate:** The throughput rate for the screener shall not exceed 200 tons per hour.

[Rules 62-4.160(2), 62-210.200(PTE), F.A.C.]

Emissions Limitations and Standards

C.3. **Visible Emissions (VE) Limit- EU 003:** The owner or operator shall NOT cause to be discharged into the atmosphere from each emissions point any process fugitive emissions that exhibit greater than 10 percent opacity.

[40 CFR 60.382 (b)]

Compliance Demonstration and Performance Testing

C.4. **Test Method.** The test method for the visible emissions shall be EPA Method 9 as specified in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. The duration of the test shall be at least 30 minutes.

The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected facility being observed. A single visible emission observer may conduct visible emission observations for up to three fugitive, 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.

[40 CFR 60.386 (b) (2), Rule 62-297.401 & 62-297.310 (4)(a)2, F.A.C.]

C.5. **VE Compliance Test Frequency.** The owner or operator shall conduct a visible emission test to demonstrate compliance with the VE limit (as specified in **Specific Condition No. C.3**) at least once during each federal fiscal year (October 1-September 30).

[Rule 62-297.310(7) (a)4.a., F.A.C.]

C.6. **Relocation Notification.** The owner or operator shall notify the Department either by fax, telephone or letter prior to relocating the unit to other location.

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

C.7. This emissions unit is also subject to the applicable requirements of 40 CFR 60 Subpart A, General Provisions.

Subsection D. This section addresses the following emissions unit.

E.U. ID No.	Emissions Unit Brief Description
004	Non-emergency Use Internal Combustion Engine for E.U. 003

The diesel engine is subject to:

New Source Performance Standards (NSPS), Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

National Emissions Standards for Hazardous Air Pollutants (NESHAP), Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines.

The engine was built on June 15, 2006, and is certified by manufacturer according to 40 CFR part 89 or 40 CFR part 94, and meets the emissions standards of 40 CFR 60.4204 (a).

The following specific conditions apply to the emissions unit listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

D.1. **Hours of Operation:** The hours of operation are not restricted.

[Rules 62-4.160(2), 62-210.200(PTE), F.A.C.]

D.2. **Permitted Capacity:** The power rating for the engine is 95 KW and 2200 rpm.

[Rules 62-4.160(2), 62-210.200(PTE), F.A.C.]

EMISSIONS LIMITATIONS AND WORK PRACTICE STANDARDS

D.3. **Nitrogen Oxide (NOx) Emissions Limit:** The NOx emissions shall not exceed 9.2 g/KW-hr or 6.9 g/HP-hr.

[40 CFR 60.4204 (a), and Table 1 of NSPS, Subpart IIII]

D.4. **Operation & Maintenance.** Owners and operators shall operate and maintain the units according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

[40 CFR 60.4206]

D.5. **Fuel Requirements:** The owner or operator shall comply with the following fuel diesel fuel requirements.

Beginning October 1, 2010, owners and operators shall use diesel fuel that meets the following per-gallon standards:

i. Sulfur Content. 15 ppm maximum for Non Road (NR) diesel fuel. 500 ppm maximum for Locomotive and Marine (LM) diesel fuel.
ii. Cetane index or aromatic content, as follows:

A minimum cetane index of 40; or
A maximum aromatic content of 35 volume percentage.

[40 CFR 60.4207 (a) & (b), 40 CFR 80.510 (a) & (b)]

D.6. **Monitoring.** If the engine is equipped with a diesel particulate filter to comply with the emission standards, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

[40 CFR 60.4209]

COMPLIANCE DEMONSTRATION AND TESTING REQUIREMENTS

D.7. The owner or operator shall operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. The owner or operator shall also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to the units.

[40 CFR 60.4211 (a)]

D.8. **Compliance Certification:** The owner or operator shall comply by purchasing an engine certified to the emission standards as described by **Specific Condition No**. **D.3**. The engine must be installed and configured according to the manufacturer's specifications.

[40 CFR 60.4211 (b)(1)]

D.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(7)(b), F.A.C.]

D.10. **Test Method:** The owner or operator shall conduct the performance tests according to procedures as described below if special compliance tests are requested by the Department pursuant to **Specific Condition No. D.9.**

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1039, Subpart F.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical

requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \qquad \text{(Eq. 1)}$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in 40 CFR 60.4213 of this subpart, as appropriate.

[40 CFR 60.4212]

RECORDKEEPING REQUIREMENTS

D.11. **Recordkeeping – PM Filter.** If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator shall keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

[40 CFR 60.4214 (c)]

D.12. **Recordkeeping – Fuel.** The owner or operator shall keep record of fuel oil analysis for each batch of diesel fuel purchased. The owner or operator shall also keep record of fuel usage.

[Rule 62-4.070 (2), F.A.C.]

D.13. This emissions unit is also subject to the applicable requirements of 40 CFR 60 Subpart A, General Provisions.

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.

Appendix NSPS, Subpart A – General Provisions.
Appendix NSPS, Subpart LL.
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix U, List of Unregulated Emissions Units and/or Activities.
Appendix I-1, List of Insignificant Emissions Units and/or Activities.

REFERENCED ATTACHMENTS.

The Following Attachments Are Included for Applicant Convenience:

Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996).
Table H, Permit History.
Table 1, Summary of Air Pollutant Standards and Terms.
Table 2, Compliance Requirements.