



**FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION**

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

RICK SCOTT  
GOVERNOR

CARLOS LOPEZ-CANTERA  
LT. GOVERNOR

HERSCHEL T. VINYARD JR.  
SECRETARY

**PERMITTEE:**

Edgar Minerals, Inc.  
651 Keuka Road  
Hawthorne, Florida 32640

Permit/Cert Number: 1070001-022-AO  
Date of Issue: June 6, 2014  
Expiration Date: June 6, 2019

Authorized Representative:  
Mr. Phil Labert, Plant Manager

Project: Air Operation Permit for Edgar Minerals, Inc.

**PROJECT AND LOCATION**

This permit authorizes the renewal operation of an industrial sand and kaolin clay mining facility (Standard Industrial Classification No. 1442, 1446 & 1445). The facility is located in Putnam County at 651 Keuka Road (County Road C-20A), Edgar, Florida 32640. The UTM coordinates are Zone 17, 407.7 km East, and 3274.1 km North.

This final permit is organized by the following sections.

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Unit Specific Conditions
- Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

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.

A handwritten signature in blue ink that reads "Richard S. Rachal III".

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

**SECTION 1. GENERAL INFORMATION**

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*CERTIFICATE OF SERVICE*

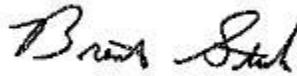
The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on June 6, 2014 to the persons listed below.

Mr. Phil Labert, Edgar Minerals, Inc. (e-mail address: [plabert@edgarminerals.com](mailto:plabert@edgarminerals.com))

Mr. Bruce Shelar, Edgar Minerals, Inc. (e-mail address: [bshelar@edgarminerals.com](mailto:bshelar@edgarminerals.com))

Clerk Stamp

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



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(Clerk)

June 6, 2014

(Date)

## SECTION 1. GENERAL INFORMATION

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### FACILITY AND PROJECT DESCRIPTION

This facility mines and processes ore reserves comprised of silica sand and kaolin clay. The existing facility consists of the following emissions unit and emission points:

Facility ID No. 1070001	
ID No.	Emission Unit Description
001	No. 2 Sand Dryer with dry cyclone
002	Raymond Mill
003	Clay Dryer
004	No.1 Rotary Sand Dryer with wet cyclone

No.2 Sand Dryer (EU001). The moist sand feedstock is fed to the No.2 sand dryer feed hopper by a front end loader. The moist sand feedstock is transferred from the feed hopper to the dryer by a conveyor belt where the raw material moisture content is reduced from approximately 5.0 to 0.5 percent. The dried sand product is then transfer by a bucket elevator to two vibrating screens for sizing. From the storage bin, the sand product is loaded directly into railcars/trucks or transferred to the bagging area.

Raymond Mill (EU 002). The dried clay is conveyed by a screw conveyor from the lump clay storage bin to Raymond Mill. The Raymond Mill consists of a Flash Dryer for further moisture reduction prior to the grinding of dried clay. A baghouse (DCE Inc. Dalamatic Baghouse, series DLM 15, Model 2/6/15) is used to control particulate matter emissions from the mill and the fugitive PM source listed below.

- Bucket elevators
- Storage bins
- Truck loading
- Railcar loading
- Small bagger
- Large bagger

Clay Dryer (EU003). The moist clay feedstock is transferred by front-end loader to the Clay dryer feed hopper. The moist clay is then transferred from the feed hopper to the Clay Dryer by a conveyor belt where the raw material moisture content is reduced from approximately 42 to 8 percent. The dried clay from the Clay dryer is transferred and stockpiled in an enclosed storage building. Within the enclosed building, the dried clay is transferred by front-end loader to the lump clay storage bin bucket elevator and then transferred to the lump clay storage bin.

No.1 Rotary Sand Dryer (EU004). The moist sand feedstock is fed to the No.1 sand dryer feed hopper by a front end loader. The moist sand feedstock is transferred from the feed hopper to the dryer by a conveyor belt where the raw material moisture content is reduced from approximately 5.0 to 0.5 percent. The dried sand product is then transfer by a bucket elevator to two vibrating screens for sizing. The screened product next flows to the primary storage bin. From the primary storage bin, the product is either loaded directly into railcars/trucks or transferred to secondary screening.

One of the baghouses is to control PM emissions from No. 1 Sand Plant including bucket elevators, screens, conveyor belt transfer, bagging, and railcar/truck loading. The second baghouse is to control PM emissions from the clay plant including lump clay bucket elevator, lump clay and EPK product storage bins, railcar/truck loading, and bagging. The baghouse is a pulse-jet dust collector that has 225 bags and a cloth area of 3,433 ft<sup>2</sup>. Estimated airflow to the new baghouse is approximately 10,000 actual cubic feet per minute (acfm) resulting in an air-to-cloth ratio (filtering velocity) of 2.9 feet per minute.

## SECTION 1. GENERAL INFORMATION

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### FACILITY REGULATORY CLASSIFICATIONS

- The facility **is not** a major source of hazardous air pollutants (HAP).
- The facility **has no** units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility **is not** a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility **is not** a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

### REGULATORY CLASSIFICATION

Fugitive emissions from aggregate stockpiles and vehicular traffic areas are controlled pursuant to the requirements of Rule 62-296.320(4)(c), F.A.C. – Unconfined Emissions of Particulate Matter.

## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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1. Permitting Authority: The permitting authority for this project is the Florida Department of Environmental Protection (Department), Northeast District Office, Waste and Air Resource Management Program. 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.
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. The mailing address and phone number of the Northeast District Office is: 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256 and Phone Number 904) 256-1700.
3. Appendices: The following Appendices are attached as part of this permit:
  - a. Appendix A. Citation Formats and Glossary of Common Terms;
  - b. Appendix B. General Conditions;
  - c. Appendix C. Common Conditions; and
  - d. Appendix D. Common Testing Requirements.
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.

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

6. Modifications: 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 Permit Required. Unless exempt from permitting pursuant to Rule 62-210.300(3)(a) or (b), F.A.C., or Rule 62-4.040, F.A.C., an air construction permit shall be obtained by the owner or operator of any proposed new, reconstructed, or modified facility or emissions unit, or any new pollution control equipment prior to the beginning of construction, reconstruction pursuant to CFR 60.15 or 63.2, or modification of the facility or emissions unit or addition of the air pollution control equipment; or to establish a PAL; in accordance with all applicable provisions of Chapter 62-210, F.A.C., Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C.

[Rule 62-210.300(1)(a), F.A.C.]

## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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8. Application for Non-Title V Operation Permit Renewal: A completed Application for Air Permit –Non-Title V Source (DEP Form No. 62-210.900(3), F.A.C.), shall be submitted to the Department at least 60 days prior to the expiration date of this operation permit. To properly apply for an operation permit, the permittee shall submit the appropriate application form, processing fee, and compliance test reports as required by this permit.

[Rules 62-4.030, 62-4.055, 62-4.220, 62-210.300(1)(a), and 62-4.210.300(2), F.A.C.]

9. The ID Number and Project Name for this source shall be used on all correspondences.

10. Definitions. Rules 62-210.200(159), (230) and (245), F.A.C. define the following terms.

- a. *Startup* is defined as the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
- b. *Shutdown* is the cessation of the operation of an emissions unit for any purpose.
- c. *Malfunction* is defined as any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

[Rule 62-210.200(159), (230), and (245), FAC.]

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

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The following specific conditions apply to the Emissions Unit and Emission Points listed below:

<b>Emissions Unit</b>	<b>Brief Description</b>
001	No.2 Sand Dryer
002	Raymond Mill
003	Clay Dryer
004	No. 1 Rotary Sand Dryer with wet cyclone

**PERFORMANCE RESTRICTIONS**

1. Maximum Operating Rate: The maximum operating rates are listed below and shall not be exceeded without prior Department approval:

<b>Emissions Unit</b>	<b>Process Description</b>	<b>Maximum Operation Rate</b>
EU 001 – No.2 Sand Dryer	Sand Throughput Rate	30 tons/hour
	Maximum Heat Input Rate	4.3 MMBtu/hour
EU 002 – Raymond Mill	Clay Drying Rate	8 tons/hour
	Maximum Heat Input Rate	1.5 MMBtu/hour
EU 003 – Clay Dryer	Clay Drying Rate	7 tons/hour
	Maximum Heat Input Rate	19.0 MMBtu/hour
EU 004 – No. 1 Rotary Sand Dryer	Sand Throughput Rate	130 tons/hour
	Maximum Heat Input Rate	40 MMBtu/hour

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

2. Permitted Fuel: All the emissions units are natural gas fired only.  
[Rules 62-4.160(2), 62-210.200(PTE), F.A.C.]
3. Hours of Operation: The hours of operation for each emissions unit are as shown in the table below.

<b>Emissions Unit</b>	<b>Hours of Operation</b>
EU 001 – No.2 Sand Dryer	Shall not exceed 7000 hours per 12 consecutive months
EU 002 – Raymond Mill	No restriction
EU 003 – Clay Dryer	No restriction
EU 004 – No. 1 Rotary Sand Dryer	Shall not exceed 2000 hours per 12 consecutive months

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

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

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**EMISSIONS STANDARDS**

4. Particulate Matter (PM) Emission Limits: The maximum allowable PM emissions rates for each emissions unit are as follows:

Emissions Unit	Emissions Limit		Basis
	Lbs/hour	Tons/year	
EU 001	4.52	15.82	Permit No.1070001-013-AC
EU 003	3.0	13.14	
EU 004	10.0	10.0	

**WORK PRACTICE STANDARDS AND MONITORING REQUIREMENTS**

5. No.1 Rotary Sand Dryer - Wet Cyclone Pressure Drop Monitoring Requirements: The pressure switch, located in the water supply line ahead of the water sprays in the spray section of the feed duct to the cyclone dust collector, shall be maintained such that the main stack exhaust fan, dryer, and dryer feed conveyor will immediately shutdown in the event the water pressure drop below 20 psi (the minimum operating level).  
[Permit No. 1070001-005-AO]
6. Operation and Maintenance (O&M) Plan: The facility shall develop and implement an operation and maintenance (O&M) plan to minimize the PM emissions from the regulated emissions points and the facility wide fugitive PM emissions. These procedures shall include the followings:
- a. Daily inspections of all process equipment and the emissions control system to identify any equipment leaks or malfunctions during the days when operating.
  - b. Conduct repair/corrective action as soon as possible once the leaks or malfunctions are identified.
  - c. Daily monitoring of the pressure drop for each control unit system during the days when operating. The control unit's pressure drop shall be operated in the range of manufacturer's recommendation. The pressure drop shall be recorded on a daily basis during the days when operating.
  - d. Daily inspection on the stack visible emissions from each dryers and baghouses during the day when operating. If an unusual high visible emission (compare to normal) is observed, the operator shall evaluate the process equipment and the control unit (if any) in order to conduct corrective action to bring the visible emissions back to normal.
  - e. Watering, or an equivalent method, shall be implemented, for facility unpaved roads, on an as needed basis, to reduce fugitive PM emissions due to truck traffic.

Upon the Department's request, the facility shall revise the O&M plan to make necessary changes to reduce fugitive PM emissions. The revision of the O&M plan does not require permit revision. The plan (with the latest revision) shall be kept on site at all times.  
[Permit No.1070001-013-AC]

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

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**TESTING REQUIREMENTS**

- 7. Standard Testing Requirements: All required emissions test (s) shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.100, F.A.C.]
- 8. Test Method (s): The owner or operator shall demonstrate compliance with the emissions limit with the test methods as described in the table below.

<b>Compliance Demonstration For</b>	<b>Test Method</b>	<b>Description</b>
PM Limit of EU 001, 003 & 004	EPA Method 1 through 4	Method for determining traverses points, velocity, flow rate, gas analysis, and moisture content. These methods shall be performed as necessary to support other methods.
	EPA Method 5	Method for determining the Particulate Matter Emissions.

The above EPA methods are specified 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 and 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

- 9. PM Compliance Test Frequency: The owner or operator shall conduct a performance test, with the test method specified in Specific Condition No.8, to demonstrate compliance with the PM emissions limit at least once every 5 years prior to permit renewal. The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests.  
[Rule 62-297.310(7)(a), F.A.C. and Permit No.1070001-013-AC]

**RECORDS AND REPORTS**

- 10. Recordkeeping: The owner or operator shall maintain the following records onsite for at least 3 years.
  - a. Monthly hours of operation for EU 001 and EU 004. The latest monthly record shall be added to the hours of operation from previous 11 consecutive months to obtain hours of operation for 12-consecutive months.
  - b. All the test reports.
  - c. A copy of O & M plan.
  - d. Inspections (pressure drop, opacity reading, leaks, and etc.) and corrective actions records.[Rule 62-4.030 and 62-4.160 (14)(b), F.A.C. Permit No.1070001-013-AC]

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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11. Test Reports. The owner and operator shall comply with the following reporting requirements.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail about the emissions unit tested and the test procedures used according to the requirements of F.A.C. Rule 62-297.310 (8)(c).

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