



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 9, 2000

Mr. Ken Conwell, Project Engineer
Koogler and Associates Environmental Services
4014 NW Thirteenth Street
Gainesville, Florida 32609

Re: Request for Additional Information

Florida Rock Industries, Inc – Application for statewide permit for a relocatable crusher

Dear Mr. Conwell:

On January 18, 2000, the Department received your application and fee for an air construction permit for a relocatable concrete and asphalt crusher, owned by Florida Rock Industries, Inc. The application is incomplete. In order to continue processing your application, the Department will need the additional information requested below. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. Please provide copies of existing construction and operating permits for this facility. The application suggests this information is in the possession of the Department but fails to provide any old permit numbers or facility identification. Department records do not match with the equipment described in the application and information recorded for Permit 1110072-005-AO, which was issued on September 28, 1996, and which appears to be a modification of permit 1110072-003-AO, which had expired.
2. Please provide facts supporting the assertion that this Cedar Rapids Portable Crushing unit is not subject to 40 CFR 60, Subpart OOO, as specified on pages 11, 12 and 14 of the application.
3. Please provide a copy of the area map and plot plan referenced on page 10 of the application. Department records do not appear to include this information. The map was not attached to the application.
4. Please provide a list of each power unit, whether internal combustion engines or electric motors associated with this relocatable crusher, including the manufacturer, model number, serial number and date of installation.
5. With respect to each item described in the response to query 4. above, please describe any repairs or renovations since this facility was last permitted, the nature and cost thereof, and further differentiating between ore or mineral contact surface and general mechanical, electrical, power-train and structural repairs.
6. Can this transportable crusher unit be operated from commercial electric power without the use of the diesel generator set described as emission unit 002 in the application?
7. Please provide an estimate of the capital cost of a replacement transportable unit similar to that for which the permit application is directed.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

Bill

8. For each crusher, or grinding mill, please provide: (i) The rated capacity in tons per hour of the existing facility being replaced; (ii) the rated capacity in tons per hour of the replacement equipment; and, (iii) the date of manufacture of such crusher or grinder. Has this assembly ever been of a size or capacity different than specified on page 13 of the application?
9. For a screening operation please provide: (i) The total surface area of the top screen of the existing screening operation being replaced; (ii) the total surface area of the top screen of the replacement screening operation; and, (iii) the date of manufacture of such screens or classifiers. Have any of these assemblies ever been of a size or capacity different than specified on page 13 of the application?
10. For each belt conveyor: (i) The width and speed of the existing belt being replaced; and, (ii) the width and speed of the replacement conveyor belt. Have any of these conveyors ever been of a size or capacity different than specified on page 13 of the application?
11. Please indicate dates and results of any written reports all performance tests conducted to demonstrate compliance with the standards set forth in Rule 62-297.310 (7)(a)4.a., Florida Administrative Code (F.A.C.) or 40 CFR 60.672, including reports of opacity observations made using Method 9 to demonstrate compliance with 40 CFR 60.672(b), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with 40 CFR 60.672(e).
12. Please specify the nature of any materials to be crushed or processed by this unit, whether quarry run lime-rock, concrete recycling, asphalt pavement recycling, specific other materials, or combinations thereof.
13. Please provide calculations indicating any VOC and Carbon Monoxide emissions from this facility, which would presumably be emitted by the internal combustion engines.
14. Please describe the precautions to prevent emissions of unconfined particulate material. If this is to be a water spray, indicate application rates in gallons per ton and location of spray nozzles. Also, please describe precautions to be applied to storage piles, haul road or yard areas.
15. Please verify that internal combustion engines will operate on commercial No. 2 virgin diesel fuel. Please provide the maximum sulfur content, by weight, of the fuel oil to be burned; the estimated daily fuel consumption; and, describe amount and facilities for fuel oil storage.

The Department will resume processing your application after receipt of the requested information. Rule 62-4.050(3), F.A.C., requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. Material changes to the application should also be accompanied by a new certification statement by the authorized representative or responsible official. Permit applicants are advised that Rule 62-4.055(1), F.A.C., now requires applicants to respond to requests for information within 90 days. If there are any questions, please call me at 850/921-9522.

Sincerely,

William Leffler, P.E.

WL

cc: J. Michael O'Berry, Authorized Representative, Florida Rock Industries, Inc.

Z 210 660 423

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (*See reverse*)

Mr. Ken Conwell
Koogler & Associates
Environmental Services
4014 NW 13 Street
Gainesville, FL 32609

PS Form 3800, April 1995

Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$

Postmark or Date

02-09-00 *SJP*



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 8, 2000

Mr. Ken Conwell, Project Engineer
Koogler and Associates Environmental Services
4014 NW Thirteenth Street
Gainesville, Florida 32609

Re: Request for Additional Information
Florida Rock Industries, Inc – Applications for statewide permit for a relocatable crusher.

Dear Mr. Conwell:

On January 18, 2000, the Department received your application and fee for an air construction permit for a relocatable concrete and asphalt crusher, owned by Florida Rock Industries, Inc. The application is incomplete. In order to continue processing your application, the Department will need the additional information requested below. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. Please provide copies of existing construction and operating permits for this facility. The application suggests this information is in the possession of the Department but fails to provide any old permit numbers or facility identification. Department records do not match with the equipment described in the application and information recorded for Permit 1110072-005-AO, which was issued on September 28, 1996, and which appears to be a modification of permit 1110072-003-AO, which had expired.
2. Please provide facts supporting the assertion that this Cedar Rapids Portable Crushing unit is not subject to 40 CFR 60, Subpart OOO, as specified on pages 11, 12 and 14 of the application.
3. Please provide a copy of the area map and plot plan referenced on page 10 of the application. Department records do not appear to include this information. The map was not attached to the application.
4. Please provide a list of each power unit, whether internal combustion engines, or electric motors associated with this relocatable crusher, including the manufacturer, model number, serial number and date of installation.
5. With respect to each item described in the response to query 4. above, please describe any repairs or renovations since this facility was last permitted, the nature and cost thereof, and further differentiating between ore or mineral contact surface and general mechanical, electrical, power-train and structural repairs
6. Can this transportable crusher unit be operated from commercial electric power without the use of the diesel generator set described as emission unit 002 in the application?
7. Please provide an estimate of the capital cost of a replacement transportable unit similar to that for which the permit application is directed.

8. For each crusher, or grinding mill, please provide: (i) The rated capacity in tons per hour of the existing facility being replaced; (ii) the rated capacity in tons per hour of the replacement equipment; (iii) the date of manufacture of such crusher or grinder. Has this assembly ever been of a size or capacity different than specified on page 13 of the application?
9. For a screening operation please provide: (i) The total surface area of the top screen of the existing screening operation being replaced; (ii) the total surface area of the top screen of the replacement screening operation; (iii) the date of manufacture of such screens or classifiers. Have any of these assemblies ever been of a size or capacity different than specified on page 13 of the application?
10. For each belt conveyor: (i) The width and speed of the existing belt being replaced; (ii) the width and speed of the replacement conveyor belt. Have any of these conveyors ever been of a size or capacity different than specified on page 13 of the application?
11. Please indicate dates and results of any written reports all performance tests conducted to demonstrate compliance with the standards set forth in Section 62-297.310 (7)(a)4.a. Florida Administrative Code (FAC) or 40 CFR 60.672, including reports of opacity observations made using Method 9 to demonstrate compliance with 40 CFR 60.672(b), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with 40 CFR 60.672(e).
12. Please specify the nature of any materials to be crushed or processed by this unit, whether quarry run lime-rock, concrete recycling, asphalt pavement recycling, specific other materials, or combinations thereof.
13. Please provide calculations indicating any VOC and Carbon Monoxide emissions from this facility, which would presumably be emitted by the internal combustion engines.
14. Please describe the precautions to prevent emissions of unconfined particulate material. If this is to be a water spray, indicate application rates in gallons per ton and location of spray nozzles. Also please describe precautions to be applied to storage piles, and haul road or yard areas.
15. Please verify that internal combustion engines will operate on commercial No. 2 virgin diesel fuel; Please provide the maximum sulfur content by weight of the fuel oil to be burned; the estimated daily fuel consumption; and describe amount and facilities for fuel oil storage.

The Department will resume processing your application after receipt of the requested information. Rule 62-4.050(3), F.A.C., requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. Material changes to the application should also be accompanied by a new certification statement by the authorized representative or responsible official. Permit applicants are advised that Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days. If there are any questions, please call me at 850/921-9522.

Sincerely,

William Leffler, P.E.

WL

cc: Michael O'Berry, Authorized Representative, Florida Rock Industries, Inc.

*Working
Paper*

TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

Florida Rock Industries, Inc

Relocatable Concrete and Asphalt Crushing Plant [Identifying Designation]
State Wide Operation

Air Construction Permit No.: (to be resolved)xxxxxxxx-AC
Facility ID No.: xxxxxxxxx
Unit No. 01 (Crusher, Conveyors, Materials handling)
Unit No. 02 (Diesel Engine Powered Generator)

Relocatable Unit

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

February 8, 2000

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. APPLICATION INFORMATION

1.1 *Applicant's Name and Address*

Florida Rock Industries, Inc.
155 East 21 st Street
P.O.Box 4667
Jacksonville Florida 32201
(904) 365 1781

1.2 *Reviewing and Processing Schedule*

January 18, 2000 Date of Receipt of Complete Application

2. FACILITY INFORMATION

2.1 *Relocatable concrete and asphalt crushing unit operating throughout Florida.*

Florida Rock industries, Inc. plans to operate a 550 TPH Cedar Rapids mobile crusher at sites throughout the state of Florida. The Facility consists of a primary crusher (Cedar Rapids model 4340), which is followed by a grizzly feeder and an 80 square foot single deck screen. Which separates rip-rap from graded aggregate. A series of belt conveyors remove and stack the retainage and screenings. The crusher, grizzly and screen are mounted on a single transportable chassis Other components: feeders, conveyors are detachable and configured for each location. The crusher is [apparently] directly powered by a GMC Detroit 1271 diesel engine. The auxillary units, conveyors and feeders are powered by on site generated electric power from a Caterpillar Model 3408 diesel generator set. Water will be added as needed to control fugitive dust emissions.

2.2 *Standard Industrial Classification Code (SIC)*

Major Group No.	17	Construction – Special Trade Contractors
Group No.	1795	Wrecking and Demolition Work

2.3 *Facility Category*

The portable crusher emits particulate matter from the handling and crushing of the concrete and asphalt material and the normal products of combustion from the diesel fuel burned in the diesel engine used to drive the generator, which provides power to the crushing units.

The portable crusher operated by the applicant is classified as a minor air pollutant emitting facility. Air pollutant emissions are less than 100 TPY of any single criteria air pollutant.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

This facility is not on the list of the 28 Major Facility Categories, Table 62-212.400-1. This facility is also classified as a natural non-Title V facility.

Based on the specific conditions in the [customary format of the]draft permit and the physical restrictions of the equipment, this facility is classified as a *minor source* of air pollution.

3. PROJECT DESCRIPTION

3.1 *This permit addresses the following emissions units:*

EMISSION UNIT NO.	SYSTEM	EMISSION UNIT DESCRIPTION
001	Size Reduction classification & conveyors (relocatable unit)	550 TPH Cedar Rapids mobile crusher at sites throughout the state of Florida. The Facility consists of a primary crusher (Cedar Rapids model 4340), which is followed by a grizzly feeder and and 80 square foot single deck screen. Mounted on a single transportable chassis, together with associated conveyors.
002	Diesel Engine	Detroit 1271
003 *	Diesel Powered Generator Set	Caterpillar Model 3408 (Described on page 19 of application but not specified as an emission unit on page 5.

4. PROCESS DESCRIPTION

4.1 *General Information*

Raisa Neginsky of the Southeast District is familiar with the facility and she reports that it is a transportable unit, which was relocated from Ft Myers. While physically setup at Florida Rock Industries St Lucie Quarry it has not been used for some time. It is presently undergoing extensive refurbishing and possible repowering.

Concrete or asphalt material is fed to the crusher and reduced in size. The crushed material is screened and stored in an open area. It is loaded and unloaded from trucks. The machinery is also suitable for processing road-base lime-rock from the applicants several quarries about the state. [The application fails to specify the nature or quantity of materials to be processes and while the application specifies that it is for a 550 TPH crusher, it is felt that the capacity is offered more of a nameplate description than a limit on production]. Dust from the crushing of the rocks will [presumably] be controlled by using water sprays when necessary. Power for the unit comes from three diesel engines, [which burn a maximum of 22 gallons per hour of No. 2 virgin diesel fuel containing up to 0.5 percent sulfur content, by weight]

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

5. RULE APPLICABILITY

The proposed project is subject to preconstruction review requirements under the provisions of Chapter 403, Florida Statutes, and Chapters 62-4, 62-204, 62-210, and 62-212, Florida Administrative Code (F.A.C.).

The proposed project is not subject to new source review under Rule 62-212.400 (5), F.A.C., Prevention of Significant Deterioration (PSD), because it is a minor unit. A determination of Best Available Control Technology (BACT) is not required for this minor facility. No analysis of the air quality impact of the proposed project's impacts on soils, vegetation and visibility along with air quality impacts resulting from associated commercial, residential and industrial growth, is required for a minor facility. Therefore, this facility may operate in any county in Florida without concern of ambient air quality violations.

The crusher and associated equipment are presumably subject to 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants. **Since the capacity of the portable unit exceeds 150 TPH. The applicant claims exemption as an old unit predating the adoption of Subpart OOO. There are many restrictive qualifying conditions which are not addressed in the application which may cause the crusher to again be subject to Subpart OOO requests for additional information directed at identifying substantial reconstruction or replacement of components that would be subject to 40 CFR 60 subpart OOO. Applicant bears the burden of demonstrating other facts supporting exemption from the federal NSPS standard**

The diesel engines are subject to Rule 62-210.300 F.A.C., Permits Required, since there are no unit specific regulatory requirements that apply. Its potential emissions are sufficiently limited by its physical capacity to merit classification as a minor source. Its potential emissions are further limited by a federally enforceable requested restriction on the allowable hours of operation. No regular testing of the diesel engine is required; however, if the Department has reason to believe that a violation of the facility wide visible emissions limit has occurred, a special compliance test can be ordered.

The emission units affected by this permit shall comply with all applicable provisions of the Florida Administrative Code and, specifically, the following Chapters and Rules of the Florida Administrative Code and the Code of Federal Regulations:

Chapter 62-4	Permits.
Rule 62-210.300	Permits Required
Rule 62-210.350	Public Notice and Comments
Rule 62-210.370	Reports
Rule 62-210.650	Circumvention
Rule 62-210.700	Excess Emissions
Rule 62-210.900	Forms and Instructions
Rule 62-212.300	General Preconstruction Review Requirements
Rule 62-296.320	General Pollutant Emission Limiting Standards

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Rule 62-297.310	General Test Requirements
Rule 62-297.400	EPA Methods Adopted by Reference
Rule 62-297.401	EPA Test Procedures
40 CFR 60, Subpart A	Standards of Performance for new Stationary Sources (general)
40 CFR 60, Subpart OOO	Standards of Performance for Non Metallic Mineral Processing Plants
40 CFR 60 Subpart M	Asbestos NESHAP

Prohibited material Concrete and building materials often contain embedded and attached asbestos products, including vermiculite aggregates, which contain asbestos, which becomes friable upon crushing. Old demolition rubble may contain other asbestos products (transite pipe and ductwork, transite formwork, insulation, fireproofing or stucco finishes) which were not subject to mandatory abatement prior to 1980. Since laboratory analysis of each piece of concrete is impractical, The facility should not process any material containing any adhered vinyl tile floor covering, asbestos containing bituminous or asphaltic roofing material, asbestos cement pipe ductwork or millboard. Recent events portrayed in national news concerning the asbestos content of vermiculite raises serious questions concerning the safety of crushing concrete made with light weight vermiculite aggregates.] A specific condition should be inserted in the permit prohibiting the crushing or grinding of any material containing one percent or more of asbestos and further citing the Asbestos NESHAP 40 CFR 60.145 and 40 CFR 60.150]

Noise and Nuisance: There are often noise and nuisance issues associated with the ultimate location of rock crushing operations, particularly as such may affect homes and small businesses. While Chapter 403 Florida statutes authorizes the Department to consider noise as pollution, the only standards developed to implement that section relate to noise from highway based motor-vehicles rather than stationary industrial operations. It is presumed that adequate citizen protection exists in local zoning, building and environmental codes.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

6. SOURCE IMPACT ANALYSIS

6.1 *Potential and Emission Summary*

The proposed portable crusher will emit the following pollutants: particulate matter, sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide. The estimated potential pollutant emissions for these emission units are summarized in the following table, which are based on 2,000 hours per year of operation and appropriate AP-42 emission factors.

Pollutants	Estimated Hourly Emissions lb/hr	Estimated Annual Emissions TPY
PM/PM ₁₀	2.3 ***	2.3 ***
NO _x	16.0	24.1
SO ₂	1.06 **	1.6
CO	{3.5}... *	[5.2] *
VOC	[1.9] *	[2.9] *

* Based on FDEP Calculation from AP42b factors for internal combustion engines not provided by applicant

** applicants' emission factors presume 0.5 % sulfur diesel fuel, but no limitation is specified in the application

*** Please note that the quantitative data upon which this evaluation is based is extracted from the current version of EPA's Manual AP-42: Compilation of Emission Factors Fifth Edition Section 11.19.1 through 11.20-9 and the emission factors therein contained are largely rated "C" "D" and "E" indicating that there is little reliable or consistent scientific data from which to form an opinion regarding emissions from the process, with any high degree of certainty. These factors have been used for all of the rock crusher and non-metallic mineral processing permits and represent the best available estimates of emissions from similar facilities operating within the general limitations on visual emissions under rule 62-297 F.A.C..

6.2 *Control Technology Review*

The crusher unit and associated conveyors are potential sources of fugitive particulate matter emissions. Emissions are **[customarily]** controlled by wetting the material being processed, as well as the storage piles and yard/roads, when needed.

The diesel engine powering the crusher will emit products of combustion. However, there are no unit specific regulatory requirements which apply to the diesel engine. Because of the small size of this diesel engine, even continuous operation would not cause this facility to be subject to the Title V regulations. Therefore, no operational restrictions for "reasonable assurance" are required. There are no suggested limitations on sulfur content of fuel in the application.

In addition to the physical design constraints, at the permittee's request, emissions from these units are further limited by production and by **[federally enforceable]** hours per year operation limits. **[which were suggested by the applicant]**

Rock and mineral crushing are inherently dusty activities. The nature and quantity of this dust depends upon many variables. In practice, control fugitive dust and local process emissions

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

remain well controlled at negligible levels by water misting, or by adding dust control agents which either increase the particle size by adding physical water mass or which create an apparent cohesion of granular material by the capillary action of surface moisture. **[The efficiency of misting for dust suppression is made nearly automatic by integrating water pumps with other process machinery.]**

6.3 *Air Quality Analysis*

An air quality analysis was not conducted for this project. The Department does not expect the low emissions from this operation to have a significant impact on the ambient air quality.

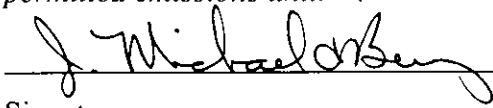
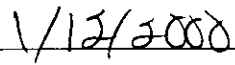
7. CONCLUSION

Based on the foregoing technical evaluation of the application, the Department has made a preliminary determination **[the applicant will ultimately demonstrate]** that the proposed project will comply with all applicable state and federal air pollution regulations provided the Department's restrictions described in the Specific Conditions of the proposed permit are met. The General and Specific Conditions are listed in the attached **[customarily formatted]** permit.

Permit Engineer: William Leffler PE

Working draft only subject to additional information requested from applicant 02/07/00

Owner/Authorized Representative

1. Name and Title of Owner/Authorized Representative: J. Michael O'Berry – Manager, Environmental Permitting Services
2. Owner/Authorized Representative Mailing Address: Organization/Firm: Florida Rock Industries, Inc. Street Address: P.O. Box 4667 City: Jacksonville State: FL Zip Code: 32201
3. Owner/Authorized Representative Telephone Numbers: Telephone: (904) 355-1781 Fax: (904) 355-0469
4. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative* of the facility addressed in this application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>  Signature  Date

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: Steven C. Cullen, P.E. Registration Number: 45188
2. Professional Engineer Mailing Address: Organization/Firm: Koogler & Associates Street Address: 4014 NW 13th Street City: Gainesville State: FL Zip Code: 32609
3. Professional Engineer Telephone Numbers: Telephone: (352) 377-5822 Fax: (352) 377-7158