

#OP-09-050
DEC# NS96-065

Operating Permit Expiration Date: February 16, 2022

State of Vermont
Agency of Natural Resources
Department of Environmental Conservation



Air Quality & Climate Division
Montpelier, Vermont

AIR POLLUTION CONTROL PERMIT
TO OPERATE

Date Permit Issued: February 16, 2017

Owner/Operator: Rock of Ages Corporation
560 Graniteville Road
Graniteville, Vermont 05654

Source: Granite Quarry & Ancillary Equipment
Rock of Ages Corporation
Bethel Quarry
Christian Hill Road
Bethel, VT 05032

FINDINGS OF FACT

(A) FACILITY DESCRIPTION

Rock of Ages Corporation (also referred to herein as "Permittee") owns and operates a granite quarry off Christian Hill Road in the town of Bethel, Vermont (also referred to herein as "Facility"). Granite is quarried at the Facility using compressed air powered drills, mechanical wedges and diamond wire saws to separate the granite blocks from the working face as part of the quarrying process. Compressed air is typically provided from compressors powered by electric motors connected to grid power. The Facility maintains some mobile diesel powered air compressors for use in areas where compressed air from the central compressor plants is not readily available.

The Permittee has not proposed any modifications to the Facility. However, operational changes at the Facility have resulted in various pieces of equipment listed in previous permits being decommissioned and removed from the Facility.

Upon issuance of this Permit, the approved regulated operations at the Facility include the following air pollution related operations, equipment and emission control devices:

Equipment Specifications			
Equipment	Horsepower ¹ (each)	Fuel Type ²	Engine Model Year
CAT C9 (Tier 3 Emissions Certified) / Sullivan Air Compressor	300 bhp	ULSD	2007
CAT 3306 (Non-Certified) / Sulair Air Compressor	250 bhp	ULSD	1987
Perkins 404D-22 (Tier 4i Emissions Certified) / Chicago Pneumatic Air Compressor	60 bhp	ULSD	2010
Various pieces of off-road loading and earth-moving equipment	Varies	ULSD	Varies

¹ bhp – engine brake horsepower (and generator kilowatt rating w/o fan) rated output as specified by the manufacturer.

² ULSD – ultra low sulfur diesel fuel, containing no greater than 0.0015% sulfur (15 parts per million) by weight.

(B) FACILITY CLASSIFICATION

The Facility is classified as a source of air contaminants pursuant to Title 10 of the *Vermont Statutes Annotated* ("10 VSA") §555 and §5-401(12) [Operations involving the handling or transferring of sand or dust producing materials] of the *Vermont Air Pollution Control Regulations* (hereinafter "*Regulations*"). In addition, §5-101 of the *Regulations* defines a *stationary source* as any structure(s), equipment, installation(s), or operation(s), or combination thereof, which emit or may emit any air contaminant, which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person or persons under common control. Based on this definition, all of the equipment, operations, and structures at the Facility are grouped together by the Agency of Natural

Resources, Department of Environmental Conservation, Air Quality & Climate Division (hereinafter "Agency") as one stationary air contaminant source for purposes of review under the *Regulations*.

While some of the portable diesel-powered equipment at the Facility, including portable air compressors, may be classified as non-road engines under Federal air quality regulations, the operation of this equipment within the confines of the Facility satisfies the requirements of a source that may be regulated by the Agency under the authority of 10 VSA §555 and §5-401(12) of the *Regulations*.

(C) PRIOR AGENCY ACTIONS/APPROVALS

The Facility has been issued the following "Permit to Operate" approvals pursuant to 10 VSA §556a and Subchapter X of the *Regulations*.

Prior Agency Approvals and Actions	
Date of Action	Description of Agency Approval/Action
March 3, 1997	#OP-95-065 – Initial Agency "Permit to Operate" approval for Facility.
March 22, 2006	#OP-01-028 – Renewal of "Permit to Operate" approval for Facility.

(D) FACILITY PERMIT APPLICABILITY

As noted above, the Facility is classified as a source of air contaminants under §5-401 of the *Regulations*.

Pursuant to 10 VSA §556a and Subchapter X of the *Regulations* a Permit to Operate is required for any air contaminant source with allowable emissions of all air contaminants combined of ten (10) tons per year ("tpy") or more or that is otherwise subject to Title 40 *Code of Federal Regulations* ("40 CFR") Part 70.

The Facility currently operates under a Permit to Operate (#OP-01-028) issued on March 22, 2006. The allowable emissions from the Facility are estimated to be greater than the ten (10) tpy combined threshold for applicability with Subchapter X of the *Regulations*, but each pollutant is less than the one-hundred (100) tpy single pollutant threshold (50 tpy for VOC) for applicability to Title V of the federal Clean Air Act. Therefore, pursuant to §§5-1002, 5-1003, and 5-1005 of the *Regulations* the Facility is classified as a "Subchapter X Major Source". In accordance with §5-1009 of the *Regulations*, the Agency is issuing the Permit to Operate herein as a renewal of the previous Permit to Operate for the Facility and the Permit herein supersedes all prior Permits for the Facility.

The allowable emissions for the Facility are summarized below:

Allowable Air Contaminant Emissions (tons/year)¹					
PM/PM₁₀/PM_{2.5}	CO	NO_x	SO₂	VOCs	HAPs²
1.6	5.0	23.2	<0.1	<5	<10/25

¹ PM/PM₁₀/PM_{2.5} - particulate matter, particulate matter of 10 micrometers in size or smaller and particulate matter of 2.5 micrometers in size or smaller, respectively (unless otherwise specified, all PM is assumed to be PM₁₀ and PM_{2.5}); SO₂ - sulfur dioxide; NO_x - oxides of nitrogen measured as NO₂ equivalent; CO - carbon monoxide; VOCs - volatile organic compounds; HAPs - hazardous air pollutants as defined in §112 of the federal Clean Air Act.

² For purposes of designation the Facility as a major or minor source of federal hazardous air pollutants (HAPs), the emissions of individual HAPs from the Facility are each <10 tpy and emissions of total HAPs combined are <25 tpy. Actual total combined HAPs from the Facility are estimated at <1 tpy

(E) REVIEW OF CRITERIA POLLUTANT EMISSIONS FOR THE PERMIT TO CONSTRUCT

(a) New Source Review Designation

The Permittee has not proposed any modifications to the Facility in conjunction with the review for this Permit to Operate and therefore is not subject to review under the New Source Review requirements in §5-501 or §5-502 of the *Regulations* at this time.

(b) Most Stringent Emission Rate

Pursuant to §5-502 of the *Regulations*, the owner/operator of each new major stationary source or major modification must apply control technology adequate to achieve the Most Stringent Emission Rate ("MSER") with respect to those air criteria pollutants for which there would be a major or significant actual emissions increase, respectively, but only for those currently proposed physical or operational changes which would contribute to the increased emissions.

The Permittee has not proposed any modifications to the Facility in conjunction with the review for this Permit to Operate and therefore is not subject to review under the MSER requirements in §5-502 of the *Regulations* at this time. In addition, there have been no prior MSER evaluations conducted for any of the previous modifications to the Facility.

(c) Ambient Air Quality Impact Evaluation

An ambient air quality impact evaluation for criteria pollutants is performed to demonstrate whether or not a proposed project will cause or contribute to violations of the national ambient air quality standards and/or significantly deteriorate existing air quality for the regulated criteria pollutants.

The Permittee has not proposed any modifications to the Facility in conjunction with the review for this Permit to Operate and therefore is not subject to an air quality impact analysis under §5-501 of the *Regulations* at this time. In addition, there have been no prior ambient air quality impact evaluations conducted for any of the previous modifications to the Facility.

(F) REVIEW OF CRITERIA POLLUTANT EMISSIONS FOR THE PERMIT TO OPERATE

(a) Applicable Requirements

The operations at the Facility are subject to the following state and federal laws and regulations, the requirements of which are embodied in the conditions of this Permit.

(i) *Vermont Air Pollution Control Regulations:*

Applicable Requirements from the Vermont Air Pollution Control Regulations
Section 5-201 – Prohibition of Open Burning
Section 5-211(2) - Prohibition of Visible Air Contaminants, Installations Constructed Subsequent to April 30, 1970.
Section 5-221(1) - Prohibition of Potentially Polluting Materials in Fuel, Sulfur Limitation in Fuel.
Section 5-231(1) - Prohibition of Particulate Matter; Industrial Process Emissions.
Section 5-231(3) - Prohibition of Particulate Matter; Combustion Contaminants.
Section 5-231(4) - Prohibition of Particulate Matter; Fugitive Particulate Matter.
Section 5-241 – Prohibition of Nuisance and Odor.
Section 5-271 – Control of Air Contaminants from Stationary Reciprocating Internal Combustion Engines.
Section 5-402 – Written Reports When Requested.
Section 5-403 – Circumvention.
Section 5-404 – Methods for Sampling and Testing of Sources.
Section 5-405 – Required Air Monitoring.
Subchapter VIII – Registration of Air Contaminant Sources.
Subchapter X – Operating Permits.

(ii) Reasonably Available Control Technology - §5-1010 of the *Regulations*

Pursuant to 10 VSA §556a(d) and §5-1010 of the *Regulations* the Agency may establish and include within any Permit to Operate emission control requirements based on Reasonably Available Control Technology ("RACT"). Based on the Facility's existing levels of emissions and emission controls, the Agency has not imposed any further requirements on this Facility under this authority at this time.

(iii) Existing Air Pollution Control Permit to Operate

The Facility currently operates under the confines of a Permit to Operate issued on March 22, 2006 (#OP-01-028). The conditions within that existing permit are considered applicable requirements pursuant to §5-1002 of the *Regulations*. The requirements of that permit which are not being modified herein are incorporated into this new Permit Operate (#OP-09-050).

(iv) Federal Requirements:

**Applicable Requirements from
Federal Regulations and the Clean Air Act**

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. Applies to new engines that commenced construction (installed) on or after June 12, 2006 at area sources of HAPs. Requires such engines to comply with NSPS Subpart IIII or JJJJ, as applicable. Also applies to existing engines that commenced construction (installed) prior to June 12, 2006 at area sources of HAPs. By May 3, 2013 requires engines equal and greater than 300 bhp to meet CO emission standards which may necessitate catalytic controls, must install crankcase ventilation system, and requires ULSD fuel. Engines <300 bhp need only meet maintenance requirements including changing oil & filter and, inspecting and replacing if necessary, air filter, hoses and belts. Does not apply to existing emergency units at an area source residential/commercial/institutional facility unless they are enrolled in demand response programs. Subject emergency units are subject to maintenance requirements, must install an elapsed hour meter and must use ULSD commencing January 1, 2015 if used for DR.

The diesel engines powering the air compressors at the Facility may be subject to this regulation, based on their pattern of usage.

Since Vermont has not taken delegation of this federal regulation, the U.S. EPA is the implementing authority and is responsible for determining applicability to either this regulation or federal non-road engine regulations.

Should this regulation be applicable, the 60 bhp and 300 bhp engines would be anticipated to comply with the new engine requirements of Subpart ZZZZ through compliance with the requirements of 40 CFR Part 60, Subpart IIII. The older 250 bhp engine would be anticipated to be subject to the existing engine requirements of Subpart ZZZZ.

**Applicable Requirements from
Federal Regulations and the Clean Air Act**

40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE). Applies to CI RICE model year 2007 and later as well as those ordered after July 11, 2005 and with an engine manufacture date after April 1, 2006. This standard also applies to stationary CI RICE that are modified or reconstructed after July 11, 2005. This regulation established emission rates for affected engines, requires routine engine maintenance and sets maximum sulfur content for the diesel fuel. Beginning October 1, 2010 applicable engines shall only use diesel fuel with a maximum sulfur content of 15 ppm (ULSD).

The 60 bhp and 300 bhp diesel engines powering the air compressors at the Facility may be subject to this regulation, based on their pattern of usage.

Since Vermont has not taken delegation of this federal regulation, the U.S. EPA is the implementing authority and is responsible for determining applicability to either this regulation or federal non-road engine regulations.

(b) Non-Applicable Requirements

Pursuant to §5-1015(a)(14) of the *Regulations*, an owner or operator of a Facility may request a permit shield from specific state or federally enforceable regulations and standards which are not applicable to the source. The applicant has not requested such a permit shield in accordance with the requirements of §5-1015(a)(14) of the *Regulations*.

(G) CONTROL OF HAZARDOUS AIR CONTAMINANTS

Pursuant to §5-261 of the *Regulations*, any stationary source subject to the rule¹ with current or proposed actual emissions of a hazardous air contaminant (HAC) equal to or greater than the respective Action Level (found in Appendix C of the *Regulations*) shall be subject to the Regulation and shall achieve the Hazardous Most Stringent Emission Rate (HMSEER) for the respective HAC. HMSEER is defined as a rate of emissions which the Secretary, on a case-by-case basis, determines is achievable for a stationary source based on the lowest emission rate achieved in practice by such a category of source and considering economic impact and cost. HMSEER may be achieved through application of pollution control equipment, production processes or techniques, equipment design, work practices, chemical substitution, or innovative pollution control techniques.

Based on information provided by the Permittee and following the use of reasonable emission control practices as required by the Permit herein, the Agency does not anticipate the Facility to have emissions of any HAC in excess of an Action Level. Therefore, the Facility is not being reviewed pursuant to §5-261 of the *Regulations* at this time.

¹ APCR §5-261(1)(c)(ii) provides that solid fuel burning equipment (not including incinerators) installed or constructed prior to January 1, 1993, and all fuel burning equipment which combust virgin liquid or gaseous fuel shall not be subject to the requirements of §5-261.

Based on the Agency's review of the Facility's application and the above Findings of Fact, the Agency concludes that the Facility, subject to the following Permit conditions, complies with all applicable state and federal air pollution control laws and regulations. Therefore, pursuant to 10 VSA §§556 and 556a, as amended, the Agency hereby issues a Permit approving the Facility, as described in the above Findings of Fact, subject to the following:

PERMIT CONDITIONS

- Construction and Equipment Specifications -

- (1) The Permittee shall construct and operate the Facility in accordance with the plans and specifications submitted to the Agency and in accordance with the conditions set forth herein, including the equipment specifications as listed in Findings of Fact (A) or their equivalent as approved by the Agency. [10 V.S.A. §§556(c) and 556a(d)] [§5-501(1) of the *Regulations*] [Application for #OP 95-065] [Application for #OP-01-028] [Application for #OP-09-050]
- (2) Particulate Matter Control Measures: At a minimum, the Permittee shall install wet suppression particulate matter controls on all operating rock drills and diamond wire saws or use equivalent control measures as approved by the Agency.

The Permittee shall operate said controls whenever this equipment is operating, and shall take whatever other means are necessary to prevent visible emissions in excess of those allowed under this Permit. The control system shall be maintained in good working order, and wet suppression controls shall have sufficient water pressure and flow rates to achieve optimum particulate matter control efficiency.

The Agency may require the installation and operation of additional water control points or other dust control measures on the Facility operations based on Agency inspections of the actual operations at this Facility. [10 V.S.A. §556(c)] [§§5-231(4) and 5-261(2) of the *Regulations*] [Application for #OP 95-065] [Application for #OP-01-028] [Application for #OP-09-050]

- Equipment Substitutions -

- (3) The Permittee may substitute alternate diesel powered air compressor(s) for those approved in this Permit provided the diesel powered air compressor(s) being installed are of similar rated output and equal or better emission characteristics as the original piece of equipment approved in this Permit. Prior to commencing any such substitution, The Permittee shall notify the Agency in writing and shall provide the following information for the proposed piece of equipment:
- (a) Make, model, serial number, and date of manufacture of the engine and compressor.
 - (b) Maximum rated engine output of the engine powering the compressor.
 - (c) An emissions certification for the replacement equipment, indicating its conformance with the Tier emissions standards of 40 *CFR* Part 89 or 40 *CFR* Part 1039, as applicable.

[§5-501 of the *Regulations*]

- Operational Limitations -

- (4) Fuel Consumption Limitation: The annual fuel consumption in the diesel engine powered compressors and materials handling equipment at the Facility, as well as all other stationary and non-road engines at the Facility but excluding fuel usage in on-highway vehicles shall not exceed a combined 75,000 gallons per calendar year. [10 V.S.A. §556(c)] [Application for #AP-09-050]
- (5) Fuel Sulfur Limitation: Only Ultra-Low Sulfur Diesel or lighter grade fuel oils with a maximum sulfur content not to exceed 0.0015 percent (15 parts per million) by weight may be used as fuel in the diesel engines at the Facility unless the Permittee obtains prior written approval from the Agency to use another type of fuel. [10 V.S.A. §§556(c)] [§5-221(1)(a) of the *Regulations*] [Application for #AP-09-050]
- (6) Generators/Engines: The Permittee shall not install or operate a stationary reciprocating internal combustion engine, as defined in the *Regulations*, unless the engine complies with §5-271 of the *Regulations* as may be applicable as well as any federal regulations including 40 *CFR* Part 60 Subpart IIII and 40 *CFR* Part 63 Subpart ZZZZ, as may be applicable. All engines, including emergency generators/engines, installed on or after July 1, 2007 must comply with the applicable emission standards (Tier 2) of §5-271 immediately upon installation. Installation of any size engine, even those below 450 bhp, may still require approval from the Agency in the form of an amended permit prior to installation. [10 V.S.A. §§556(c) and 556a(d)] [§§5-271 and 5-501 of the *Regulations*]

(7) **Generators/Engines:** The Permittee shall install, operate and maintain each stationary reciprocating internal combustion engine, and any after-treatment control device (if any), in accordance with the manufacturer's written instructions and in a manner consistent with good air pollution control practices for minimizing emissions. For non-emergency engines under 300 bhp and all emergency engines subject to the existing engine requirements of 40 CFR Part 63 Subpart ZZZZ the Permittee shall:

- (a) Install a non-resettable hour meter (emergency engines only);
- (b) At a minimum, for non-emergency engines under 300 bhp change the engine's oil and filter every 1,000 hours of operation or annually, whichever comes first, and for all emergency engines change the engine's oil and filter every 500 hours of operation or annually, whichever comes first;
- (c) At a minimum, inspect the engine's air filter every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
- (d) At a minimum, inspect the engine's hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and
- (e) Maintain records of the above.

[10 V.S.A. §§556(c) and 556a(d)] [§§5-501 and 5-1015(a)(1) of the *Regulations*] [40 CFR Part 60 Subpart IIII and Part 63 Subpart ZZZZ]

(8) **Solvent Metal Cleaning:** The Permittee shall operate the cold, solvent metal cleaning units (parts cleaners) in accordance with the following requirements and shall only use a solvent with a vapor pressure equal to or less than 0.3 pounds per square inch measured at 100°F, which includes but is not limited to the Safety-Kleen 105 hydrocarbon solvent. Prior to the Permittee using any solvent with a maximum true vapor pressure greater than 0.3 psi or using a solvent that is heated, the Permittee shall notify the Agency and comply with any additional applicable requirements of §5-253.14 of the *Regulations*.

- (a) Provide a permanent, legible, conspicuous label, summarizing the operating requirements;
- (b) Store waste solvent in covered containers;
- (c) Close the cover whenever parts are not being handled in the cleaner;
- (d) Drain the cleaned parts until dripping ceases;
- (e) Supply a solvent spray, if used, that ensures a solid fluid stream at a pressure that does not exceed ten (10) pounds per square inch gauge;
- (f) Degrease only materials that are neither porous nor absorbent; and
- (g) Cease operation of the unit upon the detection of any visible solvent leak until such solvent leak is repaired.

[10 V.S.A. §§556(c) and 556a(d)] [§5-253.14 of the *Regulations*]

(9) **Open Burning:** Open burning is prohibited except as provided for in §5-202 of the *Regulations*. Prior to conducting open burning of any material, other than leaves, brush, or tree cuttings from normal grounds maintenance, the Permittee shall contact the Air Pollution Control Officer and obtain approval for such burning, if required. [10 V.S.A. §§556(c) and 556a(d)] [§5-202 of the *Regulations*]

- Emission Limitations -

- (10) Diesel Generators/Engines: Emissions of the following pollutants from diesel engine powered equipment at the Facility shall not exceed the following limits:

Pollutant Emission Limitations	
Sullivan Air Compressor - CAT C9 300 bhp (Tier 3 emission certification)	Emission Limitations g/bhphr ¹
Nitrogen oxides (as NO ₂)	3.0
Carbon monoxide	2.6
Particulate matter	0.15
Chicago Pneumatic Air Compressor - Perkins 404D-22 60 bhp (Tier 4i emission certification)	Emission Limitations g/bhphr ¹
Nitrogen oxides (as NO ₂)	3.5
Carbon monoxide	3.7
Particulate matter	0.022

¹ g/bhphr equals grams of pollutant emitted per brake horsepower hour at rated load and speed.

Any emission testing conducted to demonstrate compliance with the above emission limit shall be performed in accordance with 40 *CFR* Part 60, Appendix A, Reference Methods 5, 7E, and 10 or equivalent methods approved in writing by the Agency at the rated load and speed of the engine. Alternatively, compliance may be demonstrated by verifying that the engine has met the engine certification requirements of 40 *CFR* Part 89 for the Tier 3 emission standards or better, or the Tier 4i standards of 40 *CFR* Part 1039, as appropriate. [10 V.S.A. §§556(c) and 556a(d)] [§§5-271(b) and 5-404 of the *Regulations*] [40 *CFR* Part 60 Subpart IIII §60.4202] [Application for #OP-09-050]

- (11) Particulate Matter: Emissions of particulate matter ("PM") from any fossil fuel burning device, except motorized vehicles, with a heat input rating of less than ten (10) million British Thermal Units per hour ("MMBtu/hr") shall not exceed 0.5 pounds per MMBtu.

Any emission testing conducted to demonstrate compliance with the above emission limit shall be performed in accordance with 40 *CFR* Part 60, Appendix A, Reference Method 5 and Part 51, Appendix M, Reference Method 202, or equivalent methods approved in writing by the Agency. [10 V.S.A. §§556(c) and 556a(d)] [§§5-231(3)(a)(i) and 5-404 of the *Regulations*]

- (12) Visible Emissions [Facility Wide]: Emissions of visible air contaminants from any installation at the Facility, except where otherwise noted in this Permit, shall not exceed twenty (20) percent opacity for more than a period or periods aggregating six (6) minutes in any hour and at no time shall visible emissions exceed sixty (60) percent opacity.

Any emission testing conducted to demonstrate compliance with the above emission limits shall be performed in accordance with 40 *CFR* Part 51, Appendix M, Methods 203B and 203C, respectively, or equivalent methods approved in writing by the Agency. [10 V.S.A. §§556(c) and 556a(d)] [§§5-211(2), 5-211(3) and 5-404 of the *Regulations*]

- (13) Volatile Organic Compounds: Emissions of volatile organic compounds from the Facility shall not equal or exceed five (5) tons per calendar year. [10 V.S.A. §§556(c) and 556a(d)] [§5-502 of the *Regulations*]

- (14) Hazardous Air Pollutants: Emission of federally regulated hazardous air pollutants (HAPs) from the Facility shall not equal or exceed ten (10) tons per year of any single HAP or twenty-five (25) tons per year of all HAPs combined per calendar year. [40 *CFR* Part 63]

- (15) Hazardous Air Contaminants: Emissions of state hazardous air contaminants (HACs) from the applicable operations at the Facility shall not equal or exceed their respective Action Level (found in Appendix C of the *Regulations*) unless the Agency has reviewed and approved such HAC emission under §5-261(2) of the *Regulations*. [10 V.S.A. §§556(c) and 556a(d)] [§5-261 of the *Regulations*]

- (16) Fugitive Particulate Matter Emissions: The Permittee shall take reasonable precautions at all times to control and minimize emissions of fugitive particulate matter from the operations at the Facility. This shall include but not be limited to the following:

- (a) The unpaved traffic and parking areas at the Facility shall be maintained by the application of water and/or generally accepted chemical treatments, such as calcium chloride unless otherwise restricted, which are applied at a rate and frequency to effectively limit visible dust emissions.
- (b) The paved traffic and parking areas at the Facility shall be periodically maintained as necessary to prevent buildup of material that may generate fugitive dust emissions. Sweeping shall be performed in a manner to minimize fugitive dust air emissions, and may include lightly wetting the paved surface immediately before sweeping, or preferably by the use of a vacuum, regenerative, or high-efficiency sweeper.
- (c) All trucks owned, operated or under the control of the Permittee shall be securely covered when operated on public roadways when loaded with materials that may generate fugitive dust.
- (d) Active storage piles that are potentially a source of fugitive emissions shall be periodically maintained by application of water and/or generally accepted chemical treatments, such as calcium chloride unless otherwise restricted, which are applied at a rate and frequency to effectively limit visible dust emissions. Inactive storage piles and exposed surfaces shall be revegetated as soon as reasonably practicable.

[10 V.S.A. §§556(c) and 556a(d)] [§5-231(4) of the *Regulations*]

- (17) Nuisance and Odor: The Permittee shall not discharge, cause, suffer, allow, or permit from any source whatsoever such quantities of air contaminants or other material which will cause injury, detriment, nuisance or annoyance to any considerable number of people or to the public or which endangers the comfort, repose, health or safety of any such persons or the public or which causes or has a natural tendency to cause injury or damage to business or property. The Permittee shall not discharge, cause, suffer, allow, or permit any emissions of objectionable odors beyond the property line of the premises. [10 V.S.A. §§556(c) and 556a(d)] [§5-241(1) and (2) of the *Regulations*]

- Record Keeping and Reporting -

- (18) Records of Facility Fuel Use: The Permittee shall maintain records of the total quantity of ultra-low sulfur diesel fuel consumed in the diesel engine powered compressors and materials handling equipment at the Facility, as well as all other stationary and non-road engines at the Facility but excluding fuel usage in on-highway vehicles, in gallons, for each calendar year. [10 V.S.A. §556(c)] [§5-405(1) of the *Regulations*]
- (19) Records of Fuel Oil Certifications [Diesel Engines]: The Permittee shall obtain from the fuel supplier, for each shipment of fuel oil received at the Facility for use in the diesel engine powered stationary and non-road equipment, a certification or invoice regarding the sulfur content of the fuel oil. The certification or invoice shall include the date of delivery, name of the fuel oil supplier, fuel type, quantity of fuel oil delivered, and a statement from the fuel oil supplier that the oil complies with the specifications for Ultra-Low Sulfur Diesel per 40 CFR Part 80 80.510(b) or a statement as to the sulfur content of the fuel oil in percent sulfur by weight. [10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the *Regulations*] [40 CFR Part 60 Subpart III] [40 CFR Part 63Subpart ZZZZ]
- (20) Records: All records shall be retained for a minimum period of five (5) years from the date of record and shall be made available to the Agency upon request. [10 V.S.A. §§556(c) and 556a(d)] [§§5-402, 5-405(1) and 5-1015(a)(7) of the *Regulations*]
- (21) Notification: The Permittee shall notify the Agency in writing within ten (10) days of any violation, of which it is aware, of any requirements of this Permit. This notification shall include, at a minimum, the cause for the violation and corrective action or preventative maintenance taken to correct the violation. [10 V.S.A. §§556(c) and 556a(d)] [§§5-402 and 5-1015(a)(6) of the *Regulations*]
- (22) Notification: The Permittee shall notify the Agency in writing of any proposed physical or operational change at the Facility which may increase the emission rate of any air contaminant to the ambient air regardless of any concurrent emission reductions that may be achieved. This notification requirement includes, but is not limited to, the proposed installation of any new equipment that is a source of air pollution, including the replacement of an existing permitted air pollution source. If the Agency determines that a permit amendment is required, a new application and the appropriate application fee shall be submitted. The permit amendment shall be obtained prior to commencing any such change except as may otherwise be allowed by the *Regulations*. [10 V.S.A. §§556(c) and 556a(d)] [§§5-402 and 5-501 of the *Regulations*]

(23) Annual Registration: The Permittee shall calculate the quantity of emissions of air contaminants from the Facility annually. If the Facility emits more than five (5) tons of any and all air contaminants per year, the Permittee shall register the source with the Secretary of the Agency (hereinafter "Secretary"), and shall renew such registration annually. Each day of operating a source which is subject to registration without a valid, current registration shall constitute a separate violation and subject the Permittee to civil penalties. The registration process shall follow the procedures set forth in Subchapter VIII of the *Regulations*, including the payment of the annual registration fee on or before May 15 of each year. [10 V.S.A. §§556(c) and 556a(d)] [Subchapter VIII §§5-802, 5-803, 5-807, 5-808 of the *Regulations*]

(24) All records, notifications and reports that are required to be submitted to the Agency by this Permit shall be submitted to:

Air Quality & Climate Division
Department of Environmental Conservation
Agency of Natural Resources
Davis 2
One National Life Drive
Montpelier, Vermont 05620-3802

[10 V.S.A. §§556(c) and 556a(d)] [§5-402 of the *Regulations*]

(25) All records, notifications and reports that are required to be submitted to the U.S. EPA by this Permit shall be submitted to:

Air Compliance Clerk
U.S. EPA-New England
5 Post Office Sq. Suite 100 (OES04-2)
Boston, MA 02109-3912

[10 V.S.A. §§556(c) and 556a(d)] [§5-402 of the *Regulations*]

- Standard Permit Conditions -

(26) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Agency which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [10 V.S.A. §§556(c) and (g) and 556a(d)] [40 CFR Part 60.11(d) and 63.6(e)]

- (27) These Permit conditions may be suspended, terminated, modified, or revoked for cause and reissued upon the filing of a written request with the Secretary of the Agency (hereinafter "Secretary") or upon the Secretary's own motion. Any modification shall be granted only with the written approval of the Secretary. If the Secretary finds that modification is appropriate, only the conditions subject to modification shall be re-opened. The filing of a request for modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay any terms or conditions of this Permit. The Secretary may provide opportunity for public comment on any proposed modification of these conditions. If public comments are solicited, the Secretary shall follow the procedures set forth in 10 V.S.A. §556 and §556a, as amended. [10 V.S.A. §§556(d) and 556a(g)] [§5-1008(a) and 5-1008(e) of the *Regulations*]
- (28) Cause for reopening, modification, termination and revocation of this Permit includes, but is not limited to:
- (a) Inclusion of additional applicable requirements pursuant to state or federal law;
 - (b) A determination that the permit contains a material mistake or that inaccurate information was used to establish emissions standards or other terms or conditions of the operating permit;
 - (c) A determination that the operating permit must be modified or revoked to ensure compliance with applicable requirements;
 - (d) A determination that the subject source has failed to comply with a permit condition;
 - (e) For Title V subject sources, a determination by U.S. EPA that cause exists to terminate, modify, revoke or reissue an operating permit;
 - (f) Those causes which are stated as grounds for refusal to issue, renew or modify an operating permit under §5-1008(a) of the *Regulations*; or
 - (g) If more than three (3) years remain in the permit term and the source becomes subject to a new applicable requirement.
- [10 V.S.A. §§556(c) and 556a(d)] [§5-1008(e)(4) of the *Regulations*]
- (29) The Permittee shall furnish to the Agency, within a reasonable time, any information that the Agency may request in writing to determine whether cause exists to modify, revoke, reissue, or terminate the Permit or to determine compliance with this Permit. Upon request, the Permittee shall also furnish to the Agency copies of records required to be kept by this Permit. [10 V.S.A. §§556(c) and 556a(d)] [§5-402 of the *Regulations*]
- (30) By acceptance of this Permit, the Permittee agrees to allow representatives of the State of Vermont access to the properties covered by the Permit, at reasonable times, to ascertain compliance with Vermont environmental and health statutes and regulations and with this Permit. The Permittee also agrees to give the Agency access to review and copy any records required to be maintained by this Permit, and to sample or monitor at reasonable times to ascertain compliance with this Permit. [10 V.S.A. §§556(c), 556a(d) and 557] [§§5-402, 5-404, and 5-1015(a)(10) of the *Regulations*]

- (31) All data, plans, specifications, analyses and other information submitted or caused to be submitted to the Agency as part of the application for this Permit or an amendment to this Permit shall be complete and truthful and, for Title V permit applications, certified by a responsible official whose designation has been approved by the Secretary. Any such submission which is false or misleading shall be sufficient grounds for denial or revocation of this Permit, and may result in a fine and/or imprisonment under the authority of Vermont statutes. [10 V.S.A. §§556(c) and 556a(d)] [§§5-505 and 5-1006(f) of the *Regulations*]
- (32) For the purpose of establishing whether or not a person has violated or is in violation of any condition of this Permit, nothing in this Permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [10 V.S.A. §§556(c) and 556a(d)]
- (33) Any permit noncompliance could constitute a violation of the federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [10 V.S.A. §§556(c) and 556a(d)] [§§5-1008(a) and 5-1008(e) of the *Regulations*]
- (34) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this Permit. [10 V.S.A. §§556(c) and 556a(d)]
- (35) No person shall build, erect, install or use any article, machine, equipment or other contrivances, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which otherwise would constitute a violation of these *Regulations*. [10 V.S.A. §§556(c) and 556a(d)] [§5-403 of the *Regulations*]
- (36) The provisions of this Permit are severable. If any provision of this Permit, or its application to any person or circumstances is held invalid, illegal, or unenforceable by a court of competent jurisdiction, the invalidity shall not apply to any other portion of this Permit which can be given effect without the invalid provision or application thereof. [10 V.S.A. §§556(c) and 556a(d)]
- (37) This Permit does not convey any property rights of any sort or any exclusive privilege, nor does it authorize any injury to private property or any invasion of personal rights. [10 V.S.A. §§556(c) and 556a(d)]
- (38) All subsequent owners and/or operators of this Facility must request an amendment and transfer of this Permit prior to commencing any operations covered by this Permit. All subsequent owners and/or operators shall submit to the Agency as part of the request for amendment all such information the Agency deems necessary to establish legal ownership and/or interest in the property and all such information the Agency deems necessary to ensure the new owners and/or operators will construct and operate the Facility in compliance with the *Regulations* and this Permit. The terms and conditions of this Permit shall remain in full force and effect after submittal of the request for amendment and until the issuance of an amended Permit or denial. Should the Secretary deny the request, the new owner and/or operator must take whatever action is necessary to comply with the denial. [10 V.S.A. §§556 and 556a] [§§5-501, 5-1004, and 5-1013(a) of the *Regulations*]

- (39) Renewable Energy Projects – Right to Appeal to Public Service Board: If this decision relates to a renewable energy plant for which a certificate of public good is required under 30 V.S.A. §248, any appeal of this decision must be filed with the Vermont Public Service Board pursuant to 10 V.S.A. §8506. This section does not apply to a facility that is subject to 10 V.S.A. §1004 (dams before the Federal Energy Regulatory Commission), 10 V.S.A. §1006 (certification of hydroelectric projects) or 10 V.S.A. Chapter 43 (dams). Any appeal under this section must be filed with the Clerk of the Public Service Board within 30 days of the date of this decision; the appellant must file with the Clerk an original and six copies of its appeal. The appellant shall provide notice of the filing of an appeal in accordance with 10 V.S.A. 8504(c)(2), and shall also serve a copy of the Notice of Appeal on the Vermont Department of Public Service. For further information, see the Rules and General Orders of the Public Service Board, available on line at www.psb.vermont.gov. The address for the Public Service Board is 112 State Street, Montpelier, Vermont, 05620-2701 (Tel. # 802-828-2358). [10 V.S.A. §§556(c) and 556a(d)]
- (40) All Other Projects – Right to Appeal to Environmental Court: Pursuant to 10 V.S.A. Chapter 220, any appeal of this decision must be filed with the clerk of the Environmental Court within 30 days of the date of the decision. The Notice of Appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Court; and must be signed by the appellant or their attorney. In addition, the appeal must give the address or location and description of the property, project or facility with which the appeal is concerned and the name of the applicant or any permit involved in the appeal. The appellant must also serve a copy of the Notice of Appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court Proceedings, available on line at www.vermontjudiciary.org. The address for the Environmental Court is 2418 Airport Road, Suite 1, Barre, VT 05641 (Tel. # 802-828-1660). [10 V.S.A. §§556(c) and 556a(d)]
- (41) This Operating Permit shall expire as indicated on the cover page to this Permit. The Permittee shall submit to the Agency a complete application for renewal of the Operating Permit at least twelve (12) months before the expiration of the Operating Permit. If a timely and administratively complete application for an operating permit renewal is submitted to the Secretary, but the Secretary has failed to issue or deny such renewal before the end of the term of this Operating Permit, then the Permittee may continue to operate the subject source and all terms and conditions of this Operating Permit shall remain in effect until the Secretary has issued or denied the operating permit renewal. However, this Operating Permit shall automatically expire if, subsequent to the renewal application being determined or deemed administratively complete pursuant to §5-1006 of the *Regulations*, the Permittee fails to submit any additional information required by the Secretary as well as information pertaining to changes to the Facility within thirty (30) days or such other period as specified in writing by the Secretary. [10 V.S.A. §§556(c) and 556a(d)] [§§5-1011 and 5-1012(a) of the *Regulations*] [§§5-1005(c) and 5-1012 of the *Regulations*]
- (42) The conditions of this Permit as set forth above supersede all conditions contained in all prior Permits issued by the Agency to the Permittee for this Facility. [10 V.S.A. §§556(c) and 556a(d)]

The Agency's issuance of this Air Pollution Control Permit relies upon the data, judgment, and other information supplied by the Permittee. The Agency makes no assurances that the air contaminant source approved herein will meet performance objectives or vendor guarantees supplied to the source Permittee. It is the sole responsibility of the Permittee to operate the source in accordance with the conditions herein and with all applicable state and federal standards and regulations.

Dated this 16th day of February, 2017.

Agency of Natural Resources

Joanna Pallito, Acting Commissioner
Department of Environmental Conservation

By: Heidi Hales
Heidi C. Hales, Director
Air Quality & Climate Division

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State of Vermont
Department of Environmental Conservation
Air Quality & Climate Division
Davis Building – 2nd Floor
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FAX (802) 828-1250

AGENCY OF NATURAL RESOURCES

February 16, 2017

Mr. Jeffery Morse
Rock of Ages Corporation
560 Graniteville Road
Graniteville, Vermont 05654

RE: Final Air Pollution Control Permit to Operate (#OP-09-050)
Bethel Quarry

Dear Mr. Morse:

The Vermont Agency of Natural Resources, Department of Environmental Conservation, Air Quality & Climate Division (Agency) has completed its review of Rock of Ages Corporation's renewal application for Air Pollution Control Permit to Operate for the Bethel Quarry on Christian Hill Road in the town of Bethel, Vermont. The Agency is now issuing a final Air Pollution Control Permit to Operate, approving the continued operation of the Facility.

This Permit to Operate incorporates and supersedes all prior Permit to Operate approvals issued in the past. Please note this permit is valid for a period of five (5) years and an application to renew the permit must be filed at least twelve (12) months prior to the date of expiration

Please review this Permit carefully to ensure that you are currently, and continue to be, in compliance with all the requirements contained in this Permit. There are a few key points included in this permit, or that you may otherwise be subject to, that I would like to highlight for your convenience:

- Fuel oil sulfur: This permit requires the use of distillate fuels with a sulfur content that does not exceed 0.0015 percent by weight (15 ppm). Distillate fuel oils meeting the 0.0015% by weight sulfur limit are commonly referred to as ultra-low sulfur diesel (ULSD).
- Fuel usage and fuel usage reporting: This permit includes a limitation on fuel usage at the Facility, restricting the total fuel usage in all stationary and non-road engines at the Facility to less than 75,000 gallons per calendar year. The permit also requires reporting this usage annually are part of the annual emissions registration for the Facility. Please be aware of this difference in reporting, as previously, only fuel usage in the compressors at the Facility was required to be reported.



- Diesel generators/engines: The federal U.S. EPA has recently adopted or amended two regulations that may apply to the diesel engines considered as stationary engines at your facility. The determination if an engine is as stationary engine or a non-road engine will depend on how this equipment is operated. These two regulations are 40 CFR Part 60 Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR Part 63 Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

The State of Vermont is not authorized to enforce these regulations, but we are providing you with an informational summary of what may be required. Please consult the actual regulations for the specific requirements. For further information, please see the EPA's website: <http://www.epa.gov/ttn/atw/icengines/>.

1. Newer engines of approximately 2006 and new model year are subject to the 4I rule and must be certified by the manufacturer to meet the respective Tier emission limit, even if used only for emergency purposes.
2. Older engines are subject to the 4Z rule and may need to be fitted with a catalyst and conduct emission testing. The compliance date was May 3, 2013. Engines less than 300 bhp and engines used only for emergency purposes are instead subject to maintenance requirements.
3. All engines, with few exceptions, are restricted to use of ULSD fuel.
4. The definition of emergency is very important for these regulations and does not include most peak shaving programs.
5. The facility must maintain and operate the engine according to the manufacturer's written recommendations for the life of the engine.
6. The rule also requires you to file various notifications directly with EPA.

If you have any questions or comments, please do not hesitate to contact me by telephone at (802)-272-3445, by email at tony.mathis@vermont.gov, or in writing at the above address.

Sincerely,



Tony Mathis, Environmental Engineer
Engineering Services/Permitting Section
Air Quality & Climate Division

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