



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **012015-004** Project Number: 2014-09-035
Installation Number: 045-0030

Parent Company: Coots Materials Company

Parent Company Address: 1700 West D Street, Vinton, IA 52349-2505

Installation Name: Coots Materials Company/Wayland Stone, LLC.

Installation Address: RR2 Box 117, Alexandria, MO 63430

Location Information: Clark County, S9, T65N, R6W

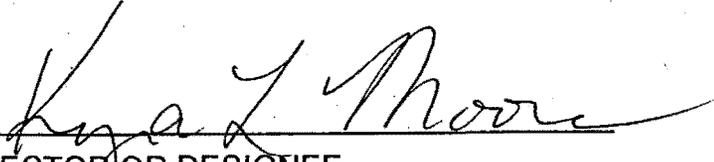
Application for Authority to Construct was made for:

Coots Materials Company will begin the construction of a new generic 600 ton per hour portable rock crushing plant for use at Wayland Stone, LLC. This rock crushing facility will not concurrently operate with any other plants while it is in operation at the Wayland Stone, LLC site located in Alexandria, MO. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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- Standard Conditions (on reverse) are applicable to this permit.
- Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

JAN 27 2015

EFFECTIVE DATE


DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Department's Air Pollution Control Program of the anticipated date of start up of these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources' regional office responsible for the area within which you are located within 15 days after the actual start up of these air contaminant sources.

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Coots Materials Company
Clark County, S9, T65N, R6W

1. PM₁₀ Emission Limitation
 - A. Coots Materials Company shall emit less than 15.0 tons of PM₁₀ in any consecutive 12-month period from the entire installation.
 - B. Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1.A.
2. Emission Limitation - NAAQS
 - A. Coots Materials Company shall maintain a daily record of material processed to demonstrate that the daily impact on ambient air quality from the entire installation does not exceed the daily NAAQS of 150.0 µg/m³ for PM₁₀ at or beyond the property boundary.
 - B. Attachment B or an equivalent form, such as an electronic form, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 2.A.
3. Best Management Practices (BMPs) Requirement
Coots Materials Company shall control fugitive emissions from all of the haul roads and vehicular activity areas at this site by performing Best Management Practices as defined in Attachment AA.
4. Generic Plant Designation and Maximum Combined Hourly Design Rate
Coots Materials Company at Wayland Stone, LLC. has been designated to be a Generic Plant Operation. The combined Maximum Hourly Design Rate (MHDR) of each of the following generic equipment types shall not exceed the rates and numbers listed in Table 1.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

Table 1: Generic Equipment

Equipment Type	Maximum Combined Hourly Design Rate	Maximum Number of Units
Crushers including primary crusher	600 tons per hour	1
Conveyors	1800 tons per hour	6
Screens	1200 tons per hour	2
Storage Bins	2400 tons per hour	8

5. Generic Plant Equipment Identification Requirement

A. Coots Materials Company shall submit the following information to the Air Pollution Control Program's Permitting Section and the Northeast Regional Office within 15 days of actual startup.

- 1) A master list of all equipment that will be permitted for use with the generic plant. This master list shall include at minimum the following information for each piece of equipment:
 - a) Manufacturer's name
 - b) Model number
 - c) Serial number
 - d) Actual MHDR
 - e) Date of manufacture
 - f) Any other additional information that is necessary to uniquely identify the equipment.
- 2) A list of the core equipment that will always be utilized with the generic plant. The core equipment associated with the generic plant shall include at least one primary unit that controls the rate of the process flow (e.g., a primary crusher or primary screen).
- 3) A determination of the applicability of 40 CFR Part 60, Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants" for each piece of equipment indicating whether each piece of equipment is subject to Subpart OOO and justification for this determination.
- 4) Coots Materials Company shall notify the Air Pollution Control Program's Permitting Section and the Northeast Regional Office when new equipment is added to the master list and when core equipment is changed within 30 days of the change.

B. Coots Materials Company shall maintain a list of the specific equipment currently being utilized with the generic plant. Any arrangement of the generic plant's equipment must be such that the primary crusher (EP-01) is not bypassed in the process flow; ergo, the rock shall be processed

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

through the primary crusher *prior* to any other process steps, less conveyors.

6. **Equipment Identification Requirement**
Coots Materials Company shall maintain easily read permanent markings on each component of the plant. These markings shall be the equipment's serial number or a company assigned identification number that uniquely identifies the individual component.
7. **Record Keeping and Reporting Requirements**
 - A. Coots Materials Company shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include SDS for all materials used
 - B. Coots Materials Company shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.
8. **Concurrent Operations**
Coots Materials Company is not permitted to operate while other plants are on site.
9. **Non-road Engine Requirements**
Coots Materials Company cannot operate at this site longer than 12 consecutive months in order to avoid recordkeeping showing the movement of the 536 horsepower or 429 horsepower diesel engine. To meet the definition of a non-road engine as stated in 40 CFR 89.2, a diesel engine cannot remain in one physical location for longer than 12 consecutive months.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW

Project Number: 2014-09-035
Installation ID Number: 045-0030
Permit Number:

Coots Materials Company
RR2 Box 117
Alexandria, MO 63430

Complete: December 1, 2016

Parent Company:
Coots Materials Company
1700 West D Street
Vinton, IA 52349-2505

Clark County, S9, T65N, R6W

REVIEW SUMMARY

- Coots Materials Company has applied for authority to construct a new 600 ton per hour generic portable rock crushing plant for use at the Wayland Stone, LLC site.
- The New Source Performance Standards Subpart-OOO, Standards of Performance for Non-metallic Mineral Processing Plants, applies to the installation.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of particulate matter are above de minimis levels, but below major source level; however, potential emissions of all remaining pollutants are below de minimis levels.
- This installation is located in Clark County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- Ambient air quality modeling was performed to determine the ambient impact of PM₁₀.
- Emissions testing is not required for the equipment.
- An application for a Basic Operating Permit is required for this installation because it is subject to NSPS Subpart-OOO.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Coots Materials Company will be constructing a new 600 tons per hour MHDR generic portable rock crushing plant at the Wayland Stone, LLC site in Alexandria, MO. Coots Materials Company is not permitted to operate with any other stationary or portable plants on-site. Depending on the specific rock crushing needs of Wayland Stone, LLC, Coots Materials Company can exchange different processing equipment as long as the generic plant formula is followed and as long as there is only one portable plant in operation at any given time. PTE calculations have been done to account for the worst-case plant emissions and a voluntary annual PM₁₀ limit will indirectly restrict other pollutants to de minimis levels. There is a basic operating permit required for this portable plant because this plant is subject to the requirements NSPS Subpart-OOO; Coots Materials Company is still responsible for following any additional requirements and applying for additional permits if deemed necessary under state rules and regulations pertaining to construction and operating permits.

No permits have been issued to Coots Materials Company from the Air Pollution Control Program.

PROJECT DESCRIPTION

This 600 tons per hour MHDR generic portable rock crushing plant is being newly constructed on-site at Wayland Stone, LLC in Alexandria, MO. Aggregate rock is being crushed and processed to be sold for use in other industries. Emissions from process equipment are uncontrolled, but undocumented watering will be done on haul roads and areas of vehicular activity to reduce particulate matter emissions from these sources. There is a 536 horsepower diesel engine and a 429 horsepower diesel engine, both of which qualify as a non-road engine. Under the definition in 40 CFR 89.2, a diesel engine cannot remain in one physical location for longer than 12 consecutive months.

EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 11.19.2, revised August, 2004.

The following table provides an emissions summary for this project. There are no *existing potential emissions* or *existing actual emissions* for this plant. *Potential emissions of the application* represent the potential emissions of the new equipment, assuming continuous operation (8760 hours per year). *New Installation Conditioned Potential* represents the voluntary PM₁₀ limit of less than 15.0 tons per consecutive 12 month period and the indirectly limited emissions levels of all other potential pollutants; the coinciding production limit, based on the voluntary limit, is 5,800 tons per day processed.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions (2013 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM	25.0	N/A	N/A	756.08	48.45
PM ₁₀	15.0	N/A	N/A	234.10	< 15.00
PM _{2.5}	10.0	N/A	N/A	36.37	2.33
SO _x	40.0	N/A	N/A	N/A	N/A
NO _x	40.0	N/A	N/A	N/A	N/A
VOC	40.0	N/A	N/A	N/A	N/A
CO	100.0	N/A	N/A	N/A	N/A
GHG (mass)	0.0 / 100.0 / 250.0	N/A	N/A	N/A	N/A
HAPs	10.0/25.0	N/A	N/A	N/A	N/A

N/A = Not Applicable

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of particulate matter are above de minimis levels, but below major source level; however, potential emissions of all remaining pollutants are below de minimis levels.

APPLICABLE REQUIREMENTS

Coots Materials Company shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for which your installation may be responsible, please consult Missouri State Rule 10 CSR 10-6.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
- *Operating Permits*, 10 CSR 10-6.065 (It is Coots Materials Company's responsibility to take necessary measures to remain in compliance with all applicable rules and regulations).
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- *Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating*, 10 CSR 10-6.405

AMBIENT AIR QUALITY IMPACT ANALYSIS (AAQIA)

Ambient air quality modeling was performed to determine the ambient impact of PM₁₀.

Table 3: AAQIA (micrograms per cubic meter)

Pollutant	Modeled Impact	Limited Impact	NAAQS	Time Period
PM ₁₀	1,632.18	130.0	150.0	24-hour

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with annual PM₁₀ production limiting special conditions and 24-hour PM₁₀ ambient air quality limiting special conditions.

Jordan Hindman
New Source Review Unit

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated September 17, 2014, received September 19, 2014, designating Coots Materials Company as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

Attachment AA: Best Management Practices

Haul roads and vehicular activity areas shall be maintained in accordance with at least one of the following options when the portable plant is operating.

1. Pavement
 - A. The operator shall pave the area with materials such as asphalt, concrete or other materials approved by the Air Pollution Control Program. The pavement will be applied in accordance with industry standards to achieve control of fugitive emissions¹ while the plant is operating.
 - B. Maintenance and repair of the road surface will be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating.
 - C. The operator shall periodically wash or otherwise clean all of the paved portions of the haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
2. Application of Chemical Dust Suppressants
 - A. The operator shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to unpaved areas.
 - B. The quantities of the chemical dust suppressant shall be applied and maintained in accordance with the manufacturer's recommendation (if available) and in sufficient quantities to achieve control of fugitive emissions from these areas while the plant is operating.
 - C. The operator shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The operator shall keep these records with the plant for not less than five (5) years and make these records available to Department of Natural Resources' personnel upon request.
3. Application of Water-Documented Daily
 - A. The operator shall apply water to unpaved areas. Water shall be applied at a rate of 100 gallons per day per 1,000 square feet of unpaved or untreated surface area while the plant is operating.
 - B. Precipitation may be substituted for watering if the precipitation is greater than one quarter of one inch and is sufficient to control fugitive emissions.
 - C. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads.
 - D. The operator shall record the date and volume of water application or the amount of precipitation that day. The operators shall also record the rationale for not watering (e.g. freezing conditions or not operating).
 - E. The operator shall keep these records with the plant for not less than five (5) years, and the operator shall make these records available to Department of Natural Resources' personnel upon request

¹For purposes of this document, Control of Fugitive Emissions means to control particulate matter that is not collected by a capture system and visible emissions to the extent necessary to prevent violations of the air pollution law or regulation. (Note: control of visible emission is not the only factor to consider in protection of ambient air quality.)

APPENDIX A

Abbreviations and Acronyms

%percent	m/s meters per second
°Fdegrees Fahrenheit	Mgal 1,000 gallons
acfmactual cubic feet per minute	MW megawatt
BACT Best Available Control Technology	MHDR maximum hourly design rate
BMPs Best Management Practices	MMBtu Million British thermal units
Btu British thermal unit	MMCF million cubic feet
CAM Compliance Assurance Monitoring	MSDS Material Safety Data Sheet
CAS Chemical Abstracts Service	NAAQS ... National Ambient Air Quality Standards
CEMS Continuous Emission Monitor System	NESHAPs National Emissions Standards for Hazardous Air Pollutants
CFR Code of Federal Regulations	NO_x nitrogen oxides
COcarbon monoxide	NSPS New Source Performance Standards
CO₂carbon dioxide	NSR New Source Review
CO₂ecarbon dioxide equivalent	PM particulate matter
COMS Continuous Opacity Monitoring System	PM_{2.5} particulate matter less than 2.5 microns in aerodynamic diameter
CSR Code of State Regulations	PM₁₀ particulate matter less than 10 microns in aerodynamic diameter
dscfdry standard cubic feet	ppm parts per million
EQ Emission Inventory Questionnaire	PSD Prevention of Significant Deterioration
EP Emission Point	PTE potential to emit
EPA Environmental Protection Agency	RACT Reasonable Available Control Technology
EU Emission Unit	RAL Risk Assessment Level
fpsfeet per second	SCC Source Classification Code
ft feet	scfm standard cubic feet per minute
GACT Generally Available Control Technology	SDS Safety Data Sheet
GHG Greenhouse Gas	SIC Standard Industrial Classification
gpm gallons per minute	SIP State Implementation Plan
gr grains	SMAL Screening Model Action Levels
GWP Global Warming Potential	SO_x sulfur oxides
HAP Hazardous Air Pollutant	SO₂ sulfur dioxide
hr hour	tph tons per hour
hp horsepower	tpy tons per year
lbpound	VMT vehicle miles traveled
lbs/hr pounds per hour	VOC Volatile Organic Compound
MACT Maximum Achievable Control Technology	
µg/m³micrograms per cubic meter	

Mr. Kent Buckingham
Company Representative
Coots Materials Company
1700 West D Street
Vinton, IA 52349-2505

RE: New Source Review Permit - Project Number: 2014-09-035

Dear Mr. Buckingham:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions and your new source review permit application is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission, whose contact information is: Administrative Hearing Commission, Truman State Office Building, Room 640, Jefferson City, Missouri 65102, www.oa.mo.gov/ahc.

If you have any questions regarding this permit, please contact Jordan Hindman, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:jhl

Enclosures

c: Northeast Regional Office
PAMS File: 2014-09-035
Permit Number: