

Asheville-Buncombe Air Quality Agency APPLICATION REVIEW SUMMARY

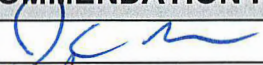
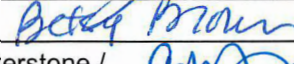

SECTION A: FACILITY INFORMATION			
Company Name:	A-1 Sandrock, Inc.		
Site Name:	APAC, Black Mountain; APAC, Weaverville; and various locations in Buncombe County		
Mailing Address:	2606 Phoenix Dr. Suite 518, Greensboro, NC 27406		
Site Address:	264 Enka Heritage Parkway and other temporary sites in Buncombe County		
General Description of Business:	Portable Asphalt, Concrete and Stone Crusher and Portable Stacking Unit		
Facility Classification:	Small	Site Status:	New (previously permitted)

SECTION B: APPLICATION INFORMATION			
Date of Application:	March 8, 2024	Application Tracking No.:	NA
Date Complete Application Received:	March 27, 2024	Board Meeting Date:	May 9, 2024
Confidentiality Requested?	No	Board Agenda Type:	Permit to Construct and Operate
Application Results:	With this permit application, A-1 Sandrock, Inc. is requesting a permit to operate a portable crusher and a portable stacker in Buncombe County.		
Permit No. Issued by Application:	11-909-24 / May 9, 2024		
Permit No. Voided by Application:	The facility previously had Permit 11-909-14 which expired on 9/30/22		

SECTION C: REGULATORY INFORMATION	
AB Air Quality Regulations:	4.0510, 4.0524, 4.0540, 4.0605, 17.0311

SECTION D: FACILITY-WIDE EMISSIONS INFORMATION		
Pollutants Reviewed as a Result of this Application or AB Air Quality Action:	Estimated Actual Emissions (Tons/Yr)	Potential Emissions (Tons/Yr)
PM	0.20	16.5*
PM ₁₀	0.08	6.1*
PM _{2.5}	0.04	4.1*
SO ₂	--	--
NO _x	--	--
CO	--	--
VOC	--	--
Greenhouse Gases, CO ₂ e	--	--
All Hazardous Air Pollutants (HAPs)	--	--
List all HAPs >10TPY of potential emissions	None.	

Emission numbers denoted with an () reflect "controlled" emissions (i.e. emissions reduced by a pollution control device).

RECOMMENDATION FOR APPROVAL			
Prepared By:	James C. Raiford / 	Date Completed:	3/27/24
Reviewed By:	Betsy Brown / 	Date Reviewed:	3/28/24
Director:	Ashley J. Featherstone / 	Date Reviewed:	3/28/24

SECTION A DETAILS

FACILITY INFORMATION [Detailed discussion of any items in Section A]

A-1 Sandrock, Inc. (Sandrock) is proposing to operate a portable crushing unit in Buncombe County. The facility previously had a permit to operate in Buncombe County that expired on September 30, 2024 (Permit No. 11-909-14). The facility is planning on crushing at 264 Enka Heritage Parkway but is being permitted to allow it to crush at other sites in Buncombe County (see below).

The process involves loading asphalt, concrete, or stone and crushing it in an impact crusher followed by screening the concrete or stone and using a conveyor to stack the aggregate for sale or other use. At the proposed sites, Sandrock will be using two stacking units, which operate independently of the portable crushing unit, to manage the crushed product. The air emissions resulting from both these processes are particulate emissions and diesel exhaust. Particulate emissions are controlled by the application of a water spray during the crushing and screening operations. The diesel engines are considered mobile sources that meet the definition of non-road engines in 40 CFR 1068.30, and therefore the diesel exhaust emissions are not subject to this permit review.

The permit is written to allow some flexibility to the equipment that may be rented and used without having to amend the air quality permit. The permit lists a portable crushing unit, including a crusher with a maximum throughput up to 400 tons per hour, one screen, and two conveyors (portable stacking units). When notification is made to the Agency of equipment moving to a Buncombe County site, the specific equipment will need to be identified along with the zoning determination.

SECTION B DETAILS

APPLICATION INFORMATION

[List all emission sources (permitted and exempt) reviewed as a result of this application, their associated control devices and pollutants. Provide a detailed discussion of any other items in Section B at bottom under "Application Notes"]

Emission Source ID	Emission Source Description 1. Type, manufacturer, capacity 2. Control device with ID (if any)	Pollutant(s) Emitted	Miscellaneous Notes
	One (1) portable stone crushing facility with a maximum process rate of up to an estimated 400 tons per hour consisting of the following equipment:	PM, PM-10, PM-2.5	
ES1	One (1) jaw crusher with a rated capacity of up to an estimated 400 tons per hour.	PM, PM-10, PM-2.5	Wet suppression techniques are employed at this piece of equipment.
ES2	One (1) screen	PM, PM-10, PM-2.5	Wet suppression techniques are employed at this piece of equipment.
ES3, ES4	Two (2) conveyors	PM, PM-10, PM-2.5	Application lists these units as Stackers.

APPLICATION NOTES

A zoning consistency determination was received from the City of Asheville on March 27, 2024. The application consisted of a signed A1 form and an equipment list. Since this facility was previously permitted, no additional forms were required.

SECTION C DETAILS

REGULATORY INFORMATION

(Identify the AB Air Quality Regulations reviewed because of this application. At a minimum, the regulations already listed should be reviewed and reason given for applicability or non-applicability. If a regulation has a standard, list the standard and indicate how the source is in compliance.)

AB Air Quality Regulation Number / Title	Emission Source ID No(s). Subject	Notes On Regulation (Compliance demonstration, applicability, etc.)
17.0500 – Title V Procedures	NA	The facility does not have potential emissions above the threshold of 100 tons/year for any criteria pollutant, 25 tons/year for any combination of hazardous air pollutants, or 10 tons/year for any individual hazardous air pollutant.
17.0700 – Toxic Air Pollutant Procedures	NA	The construction and operation of this facility does not trigger a toxics review. Non-self-propelled, non-road engines regulated under Title II of the Clean Air Act are exempt from NC Air Toxics requirements. TAP emitted by crushing, is expected to be insignificant.
4.0524 – New Source Performance Standards	ES1 – ES4	The facility is subject to NSPS Subpart OOO – “Standards of Performance for Nonmetallic Mineral Processing Plants.” Because the current crusher was constructed, modified, or reconstructed after April 22, 2008, it shall not exhibit greater than 12% opacity. The current screening operations and conveyor belts were constructed, modified, or reconstructed after April 22, 2008; therefore, they shall not exhibit greater than 7% opacity. Any wet process shall not exhibit any visible emissions.
4.0530 – Prevention of Significant Deterioration	NA	The facility does not have potential emissions above the threshold of 250 tons/year for any criteria pollutant.
4.1111 – MACT (40 CFR 63)	NA	The diesel engines are not subject to 40 CFR Part 63, Subpart ZZZZ – “National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines.” They are considered mobile sources that meet the definition of a non-road engine in 40 CFR 1068.30, and therefore are not subject (see note below).
4.0510 – Particulates from Sand, Gravel, and Crushed Stone Operations	ES1 – ES4	The facility is required to minimize particulate matter emissions so that visible emissions, TSP, and PM-10 levels do not exceed the applicable standards.

4.0540 – Particulates from Fugitive Non-Process Dust Emission Sources	All sources of fugitive non-process dust	The facility will take reasonable precautions to prevent particulate matter from becoming airborne as a result of storage, transportation, processing, and handling of materials.
4.0605 – General Recordkeeping and Reporting Requirements	Entire facility	The facility is required to submit an annual report with the throughput of crushed asphalt, stone, and/or concrete in Buncombe County.
17.0311 – Permitting of Facilities at Multiple Temporary Sites	Entire facility	The facility is permitted to operate within Buncombe County. The permittee must notify the agency at least 10 days in advance of each change of location and must obtain a zoning consistency letter for each location.

REGULATORY NOTES

According to 40 CFR 1068.30, an engine that, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another is defined as a non-road engine as long as it does not remain at a location for more than 12 consecutive months. A location is any single site at a building, structure, facility, or installation.

SECTION D DETAILS

EMISSION INFORMATION

Calculation Method Codes (List all that apply)	1 = Stack test result 2 = Material (mass) balance 3 = EPA approved information (AP-42, CTG, etc.) 4 = Other (specify in table below)			
Calculation Rejection Codes (List all that apply)	1 = Calculation error 2 = Wrong emission factor(s) used 3 = Control efficiency(ies) not accepted 4 = Other (specify in table below)			
Emission Source (ID No.)	Calculation Method Code	Accept or Reject?	Calculation Rejection Code	AB Air Quality Calculations Attached?
Entire Facility	NA	NA	NA	Yes

EMISSION NOTES

All emissions calculations were performed by AB Air Quality using the most recent DENR/DAQ emission calculation spreadsheet, "Stone Crushing Emissions Calculator Revision C" dated 5/23/2011.

The potential emissions column shows emissions calculations with wet suppression of the crushing and screening equipment and no wet suppression of the conveyors.

Estimated actual emissions were conservatively based on operating 40 hours a week for 8 weeks. The estimated time to be at this job site is 2 weeks.

SECTION E

SUPPORTING DOCUMENTATION **(Provide brief description of any attachments)**

1. Permit application submitted by A-1 Sandrock, Inc.
2. A copy of the zoning consistency determination request dated March 27, 2024.
3. Copy of check for permit and expedited permit application fees.
4. Copy of letter requesting expedited permit.
5. Draft of expedited permit letter.
6. Emission calculations
7. Draft of permit.
8. Draft of permit cover letter.
9. Draft of Invoice.