



STATEMENT OF BASIS
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 BAQ Air Permitting Division

Company Name:	Luck Stone – Enoree Development Site	Permit Writer:	Mareesa Singleton
Permit Number:	2060-0648-CA	Date:	DRAFT

DATE APPLICATION RECEIVED: April 21, 2021

FACILITY DESCRIPTION (SIC CODES/NAICS CODES): Luck Stone is an aggregate mining and processing facility with a portable processing plant with a maximum rated capacity of 550 tons per hour. The process starts inside the pit with the mining of stone and its transportation in trucks on the plant haul roads. The stone is then dumped into the primary jaw crushing and conveyed to screening. From screening, the material is conveyed to storage piles, to additional crushing, or additional screening. The stone may be conveyed to the wash plant. The wash plant is a totally wet process that is not expected to have emissions. Lastly, the material is transferred to customer trucks from one of the storage piles and the trucks exits the site using the customer haul roads. (1423/212313).

PROJECT DESCRIPTION: Luck Stone submitted a construction permit application for a new aggregate mining and processing facility located near Enoree, South Carolina. The processing plant will be portable with a maximum rated capacity of 550 tons per hour from the primary crusher. The plant will also consist of two (2) crushers, three (3) screens, twenty (20) conveyors, a wash plant, storage piles, truck hauling and loading, and an exempt EPA Certified Tier 4 550 kW diesel fired mobile generator.

SOURCE TEST REQUIREMENTS: All Emission Units 01, 02, and 03 sources are subject to an initial source test in accordance with 40 CFR 60.11 and 40 CFR 60.675.

SPECIAL CONDITIONS, MONITORING, LIMITS: The facility is requesting federally enforceable limits of less than 100.0 TPY of PM₁₀ for Title V avoidance and less than 250.0 TPY of PM for PSD avoidance. The facility will demonstrate compliance with these limits by operation of its wet suppression systems in accordance with the construction permit.

PROJECT EMISSIONS						
Pollutant	Uncontrolled*		Controlled		PTE	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Mining and Material Handling						
PM	80.51	352.65	6.81	29.84	80.51	<250.0
PM ₁₀	29.20	127.91	2.43	10.64	29.20	<100.0
PM _{2.5}	4.42	19.37	0.35	1.54	4.42	19.37
Fugitive Emissions (Roads and Storage Piles)						
PM	11.73	51.40	1.72	7.55	11.73	51.40
PM ₁₀	3.55	15.56	0.63	2.76	3.55	15.56
PM _{2.5}	0.37	1.61	0.076	0.33	0.37	1.61
Exempt Mobile Generator						
PM	0.024	0.106	--	--	0.024	0.106
PM ₁₀	0.024	0.106	--	--	0.024	0.106
PM _{2.5}	0.024	0.106	--	--	0.024	0.106
SO ₂	0.009	0.039	--	--	0.009	0.039
CO	4.24	18.59	--	--	4.24	18.59
NO _x	0.49	2.12	--	--	0.49	2.12
VOC	0.23	1.01	--	--	0.23	1.01



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FACILITY WIDE EMISSIONS			
Pollutant	Uncontrolled	Controlled	PTE*
	TPY	TPY	TPY
PM	404.05	37.39	<250.0
PM ₁₀	143.47	13.40	<100.0
PM _{2.5}	20.98	1.88	19.37

*The potential to emit (PTE) does not include fugitive emissions because the source is not one of the 28 source categories requiring the inclusion of fugitive emissions in its PTE.

OPERATING PERMIT STATUS: This is a new facility. This construction permit will be rolled over into the General Conditional Major Permit for Nonmetallic Mineral Plants.

REGULATORY APPLICABILITY REVIEW	
Regulations	Comments/Periodic Monitoring Requirements
Section II(E) – Synthetic Minor	Applicable: The facility has the potential to emit above the Title V major source threshold of 100.0 TPY for PM ₁₀ and above the PSD major source threshold of 250.0 TPY for PM. The facility is requesting a TV avoidance limit of less than 100.0 TPY of PM ₁₀ and a PSD avoidance limits of less than 250.0 TPY of PM.
Standard No. 1	Not Applicable: The facility does not have any fuel burning sources.
Standard No. 3 (state only)	Not Applicable: The facility does not contain waste combustion or reduction sources.
Standard No. 4	Applicable: Section VIII: From June 15, 1999 guidance, a process includes all process emission units and/or group of process units used to make a finished identifiable output. It was determined that this facility is one process defined as aggregate processing consisting of all of the equipment with a finished identifiable output of crushed stone. The PM limit is detailed below. Section IX: All applicable sources shall not exhibit an opacity greater than 20%. Section X: The facility is subject to this section for all non-enclosed operations.
Standard No. 5	Not Applicable: The facility is not one of the processes subject to this standard.
Standard No. 5.2	Not Applicable: The mobile generator is exempt.
Standard No. 7	Not Applicable: The facility is not one of the 28 source categories; therefore, its major source threshold is 250.0 TPY. The facility has the potential to emit more than 250.0 TPY of PM. The facility has requested a PSD avoidance limit of less than 250.0 TPY of PM. Therefore, with the limit, the facility is not major for PSD
61-62.6	Applicable: The facility shall develop and implement a Department approved facility wide fugitive dust control plan.
40 CFR 60 and 61-62.60	Applicable:



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REGULATORY APPLICABILITY REVIEW	
Regulations	Comments/Periodic Monitoring Requirements
	Subpart A and OOO: The facility is subject to these Subparts. Not Applicable: Subpart IIII: The generator meets the definition of a non-road engine.
40 CFR 61 and 61-62.61	Not Applicable: This facility does not contain sources subject to this standard.
40 CFR 63 and 61-62.63	Not Applicable: Subpart ZZZZ: The generator meets the definition of a non-road engine.
61-62.68	Not Applicable: This facility does not store or use chemicals subject to 112(r) above the threshold quantities.
40 CFR 64 (CAM)	Not Applicable: Not a Title V facility.

Explanation of Synthetic Minor Limits					
Permit ID	Equipment ID	Permit Issue Date	Pollutant	Emission Limit (TPY)	Explanation
2060-0648-CA	Facility Wide	DATE	PM	<250.0	PSD Avoidance
2060-0648-CA	Facility Wide	DATE	PM ₁₀	<100.0	Title V Avoidance

Standard No. 4 Allowable					
Process	Process Weight Rate (tons/hr)	PM Allowable (lb/hr)	Uncontrolled Emissions PM (lb/hr)	Controlled Emissions PM (lb/hr)	Monitoring
Aggregate Processing	550	70.1	74	6.2	Operation of the wet suppression systems in accordance with the permit

AMBIENT AIR STANDARDS REVIEW	
Regulations	Comments/Periodic Monitoring Requirements
Standard No. 2	PM ₁₀ emissions from mining and material handling are exempt but for conservatism, were modeled using AERMOD. Facility-wide PM _{2.5} emissions are also below the exemption level. See modeling summary dated May 27, 2021.
Standard No. 8 (state only)	No air toxics are emitted that require a compliance demonstration. See modeling summary dated May 27, 2021.

PUBLIC NOTICE



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This construction permit(s) will undergo a 30-day public notice period, in accordance with SC Regulation 61-62.1, Section II(N), SC Regulation 61-62.5, Standard 7(q), and SC Regulation 61-62.1, Section II(E) to establish synthetic minor limits.

SUMMARY AND CONCLUSIONS

It has been determined that this source, if operated in accordance with the submitted application, will meet all applicable requirements and emission standards.

DRAFT