EVERYONE 12+ IS NOW ELIGIBLE!

Everyone 12 and older in SC is now eligible for the COVID-19 vaccine!
Get your vaccine ASAP.

THE COVID-19 VACCINE

COVID-19 Vaccine Information Line
1-866-365-8110
www.scdhec.gov/vaxfacts
Proposed Enoree Development Site Quarry
PUBLIC MEETING

- To avoid echoing or feedback, all lines are muted.
- At the end of the presentation, we will unmute and call upon those who would like to speak.
- This virtual meeting will be recorded and posted on our webpage.
Option to Call In

If you are experiencing audio problems, join the virtual hearing by phone:

Phone number: 1 (864) 558-7311
Access Code: 870 563 145#

Exits the hearing. (If you accidentally exit the hearing, you can rejoin.)
Proposed Enoree Development Site Quarry

Mine Operating Permit Application I-002335

Spartanburg County

PUBLIC MEETING
Agenda

• Gathering Time & Instructions for Participating Remotely
• Introductions & Opening Remarks
• DHEC Presentations
• Questions & Answers Period
• Closing Remarks
• Meeting Adjourned
Mining Topics

• Mine Permitting Process
• General Information
• Proposed Permitted Area
• Reclamation
• Next Steps
• Addressing Concerns
Apr 08, 2021
• DHEC-Mining and Reclamation Program Receives Application
• Begins Administrative Review

May 13, 2021
• DHEC-MR Publishes Initial Public Notice
• Begins Technical Review
• DHEC-MR Acknowledges Public Hearing Request (June 09, 2021)

Aug 19, 2021
• DHEC holds a Public Meeting
• Technical Review Continues

Sep 02, 2021
• DHEC holds a Public Hearing
• **Comment Period Ends September 17, 2021**
• Technical Review Continues

TBD
• DHEC to Make Mine Permitting Decision
• Summary Response to Comments, if approved
• Opportunity to Appeal
Proposed Site

TMS#: 4-50-00-007  
4-55-00-076  
4-55-00-077  
Total Area: 542.9ac  
Land Use: Mostly Undeveloped  
Owner: Luck Stone Corporation  
(under purchase agreement)
Proposed Permitted Area

Total Area: 542.9ac
Affected Area: 255.8ac
Buffer: 104.6ac
Future Reserves: 182.5ac

Buffer Area is defined as setback or areas that will not be disturbed beyond the pre-mine natural state.
Proposed Permitted Area

Total Area: 542.9ac  
Affected Area: 255.8ac  
Buffer: 104.6ac  
Future Reserves: 182.5ac

Prior to the initiation of activity in future reserves, the operator shall:
• submit detailed mine and reclamation plans to DHEC for approval
• Receive approval from USACE to disturb wetlands or stream channels
• Adjust reclamation costs to cover proposed activities
Proposed Permitted Area

Total Area: 542.9ac
Affected Area: 255.8ac
Buffer: 104.6ac
Future Reserves: 182.5ac

- Green - Overburden Stockpile Area
- Teal - Pit Area
- Orange – Initial Plant Area
- Purple - Office, Scale House, Maintenance Area, Haul Road, and Final Plant Area
Proposed Mining Process

- Installation of BMPs
- Clearing of trees and vegetation
- Topsoil removed and stockpiled for future reclamation
- Overburden stockpiled and reclaimed as soon as feasible
- Pit developed and dewatered, as needed
- Granite processed and stockpiled in plant area
Proposed Mining Process

- Installation of BMPs
- Clearing of trees and vegetation
- Topsoil removed and stockpiled for future reclamation
- Overburden stockpiled and reclaimed as soon as feasible
- Pit developed and dewatered, as needed
- Granite processed and stockpiled in plant area
Example of a granite quarry excavating ore
Proposed Mining Process (cont.)

• Maximum proposed depth: 560ft.

• Applicant requests permission to blast
  • Landowners with structures within a half mile of blasting will be offered a pre-blast survey

• Applicant may request to mine permitted future reserve areas (requires DHEC approval)
Reclamation

Reclamation is the planned process for restoring the affected land to a useful purpose while protecting natural resources of the surrounding area.

- Reclamation plan included in application
  - Will be reclaimed to ponds and grasslands
  - Land is sloped and graded during the mining process
  - Stockpiled topsoil used to enhance vegetation
- Reclamation bond is required prior to permit issuance to ensure that reclamation is completed
Example of a reclaimed granite quarry
Other DHEC Requirements

• Bureau of Air Quality
  • Air Synthetic Minor Construction Permit

• Bureau of Water
  • National Pollution Discharge Elimination System (NPDES) General Permit
  • Stormwater Pollution Prevention Plan (SWPPP)
Agency Responses

• SC Department of Natural Resources (DNR)
  • conducted site visit with applicant and DNR on June 23, 2021
  • recommendations received on June 25, 2021
  • DNR offered no objection beyond these recommendations
Common Concerns

• General blasting concerns.
• Dewatering will lessen the groundwater supply for nearby residents.
• Increased truck traffic will be unsafe for neighborhood residents.
Blasting

Typically, 2-4 times a month

“...a safe particle velocity maximum of 2.0in/sec is recommended for all houses.”
--U.S. Bureau of Mines

DHEC limits maximum particle velocity to 1.0in/sec.

All residences >1,000ft from blasting
Common Concerns

• General blasting concerns.
• Dewatering will lessen the groundwater supply for nearby residents.
• Increased truck traffic will be unsafe for neighborhood residents.
Dewatering

Maximum Depth: 560ft.

Primary Dewatering Layer: Granite

(a) Low T

(b) High T
Common Concerns

• General blasting concerns.
• Dewatering will lessen the groundwater supply for nearby residents.
• Increased truck traffic will be unsafe for neighborhood residents.
Increased Truck Traffic

- S.C. Mining Act does not grant DHEC authority to regulate truck traffic outside the permit boundary.
  - DHEC can only evaluate physical effects of mining, such as blasting or undermining.
- SC DOT, SC Public Service Commission, or Spartanburg County Department of Public Works have jurisdiction
  - SC DOT **District 3**
    252 S. Pleasantburg Drive
    Greenville, SC 29607
    864-241-1010
  - SC Public Service Commission
    contact@psc.sc.gov | 803-896-5100
  - Spartanburg Public Works
    Director: Travis W. Brown
    twbrown@spartanburgcounty.org | 864-595-5320
Next Steps

• DHEC will review all comments received and conclude the technical review.

• DHEC will make a final permitting decision and provide notification to everyone on mailing list.
  • If approved, a written response to all comments received will be included

• Final decision date begins 15-day appeal period.
South Carolina Department of Health and Environmental Control

Draft Synthetic Minor Air Construction Permit

Bureau of Air Quality
Project Overview

• 550 tons per hour Stone Processing Plant
  • Process Equipment
    • Crushers
    • Screens
    • Conveyors

• Additional sources of dust generated onsite
  • Plant and Customer Haul Roads
  • Storage Piles
Draft Air Construction Permit

• Primary Pollutant: particulate matter (dust)

• Permit compliance demonstration includes minimization and control of dust

• Weekly recorded inspection of water spray systems to ensure proper operation and dust control

• Potential (worst case) emissions wet suppression (the controlled emissions) are below major thresholds
Particulate Matter

- Mixture of solid particles and liquid droplets
- PM10: Inhalable particles, with diameters 10 microns (μm) and smaller
- PM2.5: Fine inhalable particles, with diameters 2.5 microns (μm) and smaller
Opacity Limits

• Federal Regulation Opacity Limits
  • Required to test equipment for compliance with opacity limit
    • 7% opacity limit for screens and conveyors
    • 12% opacity limit for crushers

• State Opacity Limits
  • 20% facility-wide opacity limit (includes dust from process equipment, storage piles, and on-site truck traffic)
Example Simulated Opacities

20% Opacity  30% Opacity  40% Opacity  50% Opacity

Source: Alaska Department of Environmental Conservation
### Air Quality Analysis

<table>
<thead>
<tr>
<th>Air Pollutant</th>
<th>Max Facility Predicted Concentration (μg/m³)</th>
<th>Location Background Concentration (μg/m³)</th>
<th>Total Concentration (μg/m³)</th>
<th>State/Federal Standard (μg/m³)</th>
<th>Meets Standard?</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$ 24-hr</td>
<td>50.3</td>
<td>34</td>
<td>84</td>
<td>150</td>
<td>Yes</td>
</tr>
</tbody>
</table>

- PM$_{10}$: The total concentration (facility predicted + background) is below the National Ambient Air Quality Standard (~56% of standard)
- PM$_{2.5}$: Controlled emissions for each source is less than 1.14 pounds per hour and exempt from modeling
Onsite Dust Control

• Dust control plan to be submitted prior to operation
  • Addresses truck traffic, storage piles, and process equipment
    • Crusher, screens, and conveyors equipped with a water spray system
    • Onsite truck traffic dust is controlled by the use of water trucks
Air Construction Permit

• Applicable State and Federal Regulations that were established to be protective of the environment and public health, including the health of sensitive populations such as asthmatics, children, and the elderly

• Recordkeeping, reporting and/or testing requirements to demonstrate compliance

• Synthetic minor construction permit will restrict the facility to less than 250.0 tons per year of PM and less than 100.0 tons per year of PM$_{10}$ to avoid major thresholds
Contact Information

Mareesa Singleton, Permit Writer
Air Permitting Division
Bureau of Air Quality
803-898-4113
singlemj@dhec.sc.gov

Steve McCaslin, Air Permitting Director
Air Permitting Division
Bureau of Air Quality
803-898-3839
mccaslsd@dhec.sc.gov
Next Steps for Draft Air Permit

• DHEC will review all comments received

• DHEC will make a final permitting decision and provide notification and a written response to all comments to everyone on mailing list

• Final decision date begins 15-day appeal period
How to Comment

Submit comments by mail or email through September 17, 2021 to:

Jeremy Eddy, PG
DHEC/BLWM
2600 Bull Street
Columbia, SC 29201
eddyje@dhec.sc.gov

Additional information can be found at:

www.scdhec.gov/LuckStoneEnoree
How to Participate

To indicate you would like to speak:

• Unmute your line

• Click the ‘Hand Raise’ icon

Hand Raise (click this icon to indicate you would like to speak)
Muted (no one in the meeting can hear you)
Unmuted (everyone in the meeting can hear you)
If you have called into the meeting, press *6 to unmute
# DHEC Staff

## Bureau of Land & Waste Management Division of Mining & Solid Waste Management
- Juli Blalock  Assistant Bureau Chief
- Joe Koon  Section Manager
- Jeremy Eddy, PG  Project Geologist

## Bureau of Air Quality Air Construction Permitting Section
- Steve McCaslin  Air Permitting Director
- Mareesa Singleton  Permit Writer

## Bureau of Water Industrial Wastewater Permitting Section
- Brett Caswell  Environmental Engineer

## Bureau of Environmental Health Services Spartanburg Office
- Natalie Kirkpatrick  Area Director
- Ben Whitmire  Office Manager