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 Fairfield I-77 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: 168 852 451#

Exits the hearing. (If you accidentally exit the hearing, you can rejoin.)
Proposed Fairfield I-77 Quarry
Mine Operating Permit Application I-002329
Fairfield 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 Expressed Concerns
March 16, 2021
• DHEC-Mining and Reclamation Program Receives Application
• Begins Administrative Review

April 15, 2021
• DHEC-MR Publishes Initial Public Notice
• Begins Technical Review
• DHEC-MR Acknowledges Public Hearing Request (May 12, 2021)

July 22, 2021
• DHEC holds a Public Meeting
• Technical Review Continues

August 05, 2021
• DHEC holds a Public Hearing
• **Comment Period Ends August 20, 2021**
• Technical Review Continues

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

TMS# 166-00-00-018
    166-00-00-028
    166-00-00-030
Total Area: 416.8ac
Land Use: Undeveloped
Owner: Luck Stone Corporation
    (under purchase agreement)
Proposed Permitted Area

Total Area: 416.8ac
Affected Area: 259.5ac
Buffer: 74.9ac
Future Reserves: 77.9ac

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

Total Area: 416.8ac  
Affected Area: 259.5ac  
Buffer: 74.9ac  
Future Reserves: 77.9ac

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: 416.8ac
Affected Area: 259.5ac
Buffer: 74.9ac
Future Reserves: 77.9ac

- 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: 485ft.
- 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
Emergency Water Reservoir
Loudon County, Virginia

Example of a reclaimed granite quarry
Other DHEC Permits

• 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 State Historic Preservation Office
  • Requested intensive survey performed

• SC Department of Natural Resources
  • conducted site visit with applicant and DNR on May 11, 2021
  • recommendations received on May 14, 2021
  • DNR offered no objection beyond these recommendations

• Town of Ridgeway
  • Expressed concerns for Public Water Supply Well
Common Concerns

• General blasting concerns.
• Dewatering will lessen the groundwater supply for nearby residents.
• Increased truck traffic will be unsafe for neighborhood residents.
• Protection of cultural/historic places.
• Impacts to potential Scenic Byway project.
• Impacts to Lake Wateree.
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 >1,500ft from blasting
Common Concerns

• General blasting concerns.
• Dewatering will lessen the groundwater supply for nearby residents and/or the town water supply.
• Increased truck traffic will be unsafe for neighborhood residents.
• Protection of cultural/historic places.
• Impacts to potential Scenic Byway project.
• Impacts to Lake Wateree.
Dewatering

Maximum Depth: 485ft.

Primary Dewatering Layer: Granite
Common Concerns

• General blasting concerns.
• Dewatering will lessen the groundwater supply for nearby residents and/or the town water supply.
• **Increased truck traffic will be unsafe for neighborhood residents.**
• Protection of cultural/historic places.
• Impacts to potential Scenic Byway project.
• Impacts to Lake Wateree.
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 Fairfield County Department of Public Works have jurisdiction
  - SC DOT **District 4**
    1232 JA Cochran Bypass
    Chester, SC 29706
    (803) 377-4155
  - SC Public Service Commission
    contact@psc.sc.gov | (803) 896-5100
  - Fairfield Public Works
    Director: Jonathan Burroughs
    jonathan.burroughs@Fairfield.sc.gov | (803) 635-5209
Common Concerns

• General blasting concerns.
• Dewatering will lessen the groundwater supply for nearby residents and/or the town water supply.
• Increased truck traffic will be unsafe for neighborhood residents.
• Protection of cultural/historic places.
• Impacts to potential Scenic Byway project.
• Impacts to Lake Wateree.
State Historic Preservation Office (SHPO)

- Recon Survey
  - Entire site + 1/2mi search radius
  - 8 sites
    - Not eligible for NRHP
  - 7 resources
    - 6 not eligible for NRHP
  - 1 Cemetery
    - Not eligible for NRHP
    - Protected by state law
    - Protected by 1,800ft buffer
Common Concerns

• General blasting concerns.
• Dewatering will lessen the groundwater supply for nearby residents and/or the town water supply.
• Increased truck traffic will be unsafe for neighborhood residents.
• Protection of cultural/historic places.
• Impacts to potential Scenic Byway project.
• Impacts to Lake Wateree.
• Minimum 50ft. undisturbed perimeter
• Pit and initial plant area greater than 3,000ft
• Neither project anticipated to impact the other

Piedmont Gateway State Scenic Byway
Common Concerns

- General blasting concerns.
- Dewatering will lessen the groundwater supply for nearby residents and/or the town water supply.
- Increased truck traffic will be unsafe for neighborhood residents.
- Protection of cultural/historic places.
- Impacts to potential Scenic Byway project.
- Impacts to Lake Wateree.
Next Steps

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

• 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.
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

- Pollutant addressed: 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 below major thresholds with wet suppression
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
Draft Air Construction Permit

• Federal Regulation Opacity Limitations
  • Required to test equipment to ensure opacity limitation being met
  • 7% opacity limit for screeners/conveyors
  • 12% opacity limit for crushers

• State Opacity Limitations
  • 20% facility-wide opacity limit (includes dust from 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 Predicted Concentration (μg/m³)</th>
<th>Background Concentration (μg/m³)</th>
<th>Total Concentration (μg/m³)</th>
<th>State/Fed. Standard (μg/m³)</th>
<th>Meets Standard?</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$ 24-hr</td>
<td>53.8</td>
<td>34</td>
<td>88</td>
<td>150</td>
<td>Yes</td>
</tr>
</tbody>
</table>

- The background concentration of the location is 34 μg/m³
- The predicted facility concentration is 53.8 μg/m³
- Combined, the total concentration will be 88 μg/m³ and remains below the National Ambient Air Quality Standard (~59% of standard)
Onsite Dust Control

• Dust control plan to be reviewed prior to operation
  • Addresses water trucks, truck traffic, storage piles, and process equipment
  • Crusher/screeners/conveyors equipped with wet suppression spray nozzles
  • Onsite truck traffic dust is controlled by the use of water trucks
Air Construction Permit

• Includes:
  • Applicable State/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 that demonstrate compliance
  • “Synthetic Minor” construction permit restricts facility to less than 250.0 tons/yr for PM and less than 100.0 tons/yr PM$_{10}$ to avoid “major” thresholds
Contact Information

Lance Davis, Permit Writer
Air Permitting Division
Bureau of Air Quality
803-898-7220
davisml@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 August 20, 2021 to:

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

Additional information can be found at:

www.scdhec.gov/LuckStoneFairfield
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, GIT** Project Geologist

## Bureau of Air Quality Air Construction Permitting Section
- **Steve McCaslin** Air Permitting Director
- **Lance Davis** Permit Writer

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

## Bureau of Environmental Health Services Columbia Office
- **Veronica Barringer** Area Director
- **Chris Corley** Air Team Lead