



Proposed River Bend Quarry Spartanburg County

Public Meeting Mine Operating Permit & Air Construction Permit

January 11, 2024





Why We Are Here

- Share information on the proposed River Bend Quarry, DHEC's role, and environmental permitting processes.
- Answer your questions.
- Conduct a formal public hearing to record your oral comments.

www.scdhec.gov/RiverBendQuarry

Public Meeting

- Presentations & information sharing
- Informal questions & facilitated discussions

Public Hearing

- Formal proceeding
- Comments recorded
- Not interactive
- Time-limited

Written Comments Accepted through January 26, 2024

How to Provide Comments



Oral comments recorded during
tonight's public hearing



Email



U.S. Mail



DHEC ePermitting Portal
River Bend Aggregates, LLC / River Bend Quarry

Agenda

- Introductions & Opening Remarks
- DHEC Presentations
- Questions & Discussion
- Closing Remarks
- Meeting Adjourned
- Public Hearing Begins

Mining Topics

- Mine Permitting Process
- General Information
- Proposed Permitted Area
- Reclamation
- Next Steps
- Addressing Common Concerns

Oct. 23, 2023

- DHEC-Mining and Reclamation Program Receives Application
- Begins Administrative Review

Dec. 7, 2023

- DHEC-MR Publishes Initial Public Notice & Hearing Notice
- Begins Technical Review

Jan. 11, 2024

- DHEC holds a Public Hearing/Meeting
- **Comment Period Ends January 26, 2024**
- Technical Review Continues

TBD

- DHEC to Make Mine Permitting Decision
- Summary Response to Comments
- Opportunity to Appeal

Proposed Site

TMS#: 3-25-00-013.02;
3-25-00-013.00; 3-25-00-014.01;
3-25-00-014.02; 3-25-00-014.00;
3-25-00-010.00; 3-25-00-007.00;
3-25-00-006.00; 3-25-00-006.06

Total Area: 443.1 ac

Current Land Use: Undeveloped

Owner: River Bend Aggregates,
LLC (under purchase
agreement)



Proposed Permitted Area

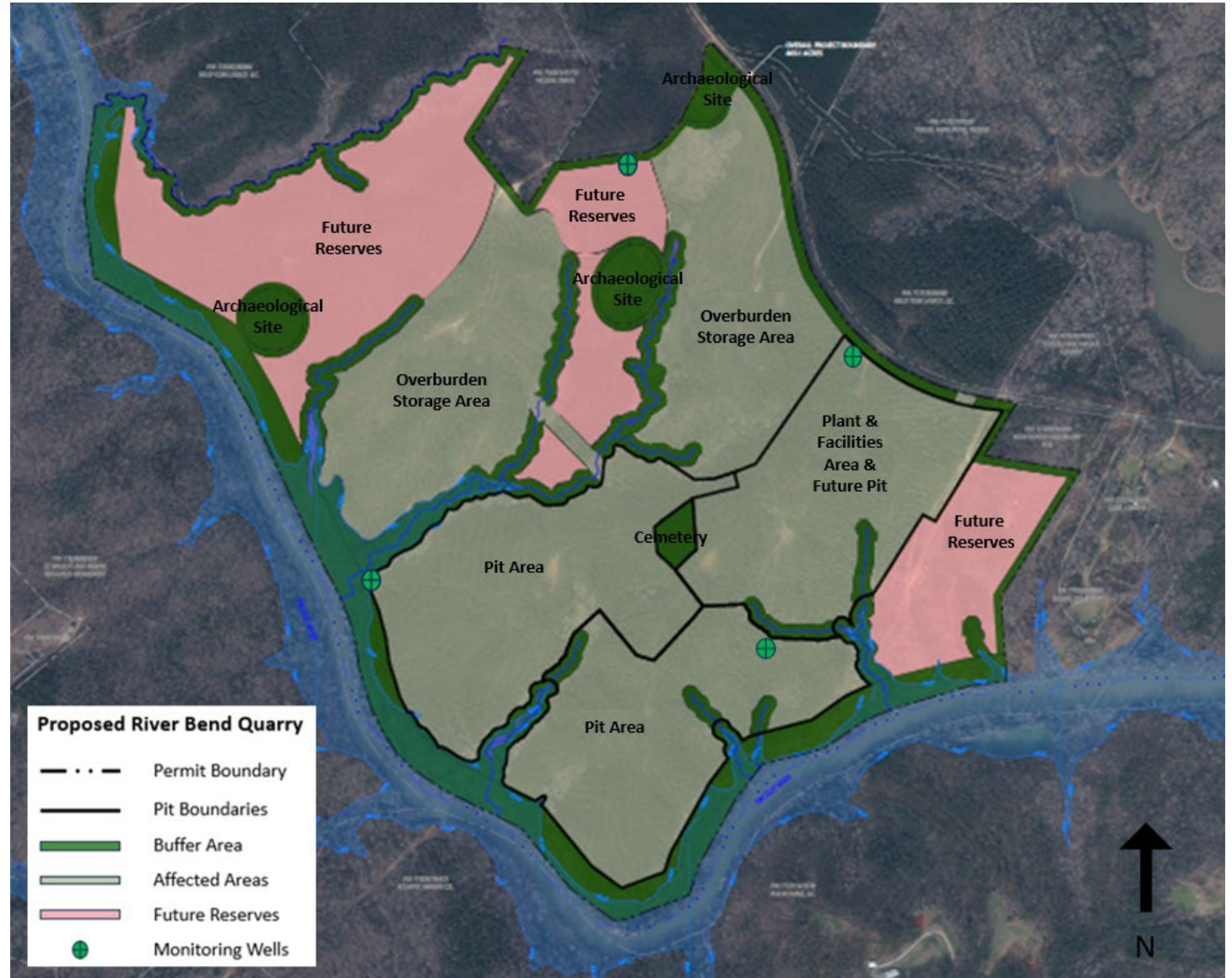
Total Area: 443.1ac

Affected Area: 241.4ac

Buffer: 105.9ac

Future Reserves: 95.8

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



Proposed Permitted Area

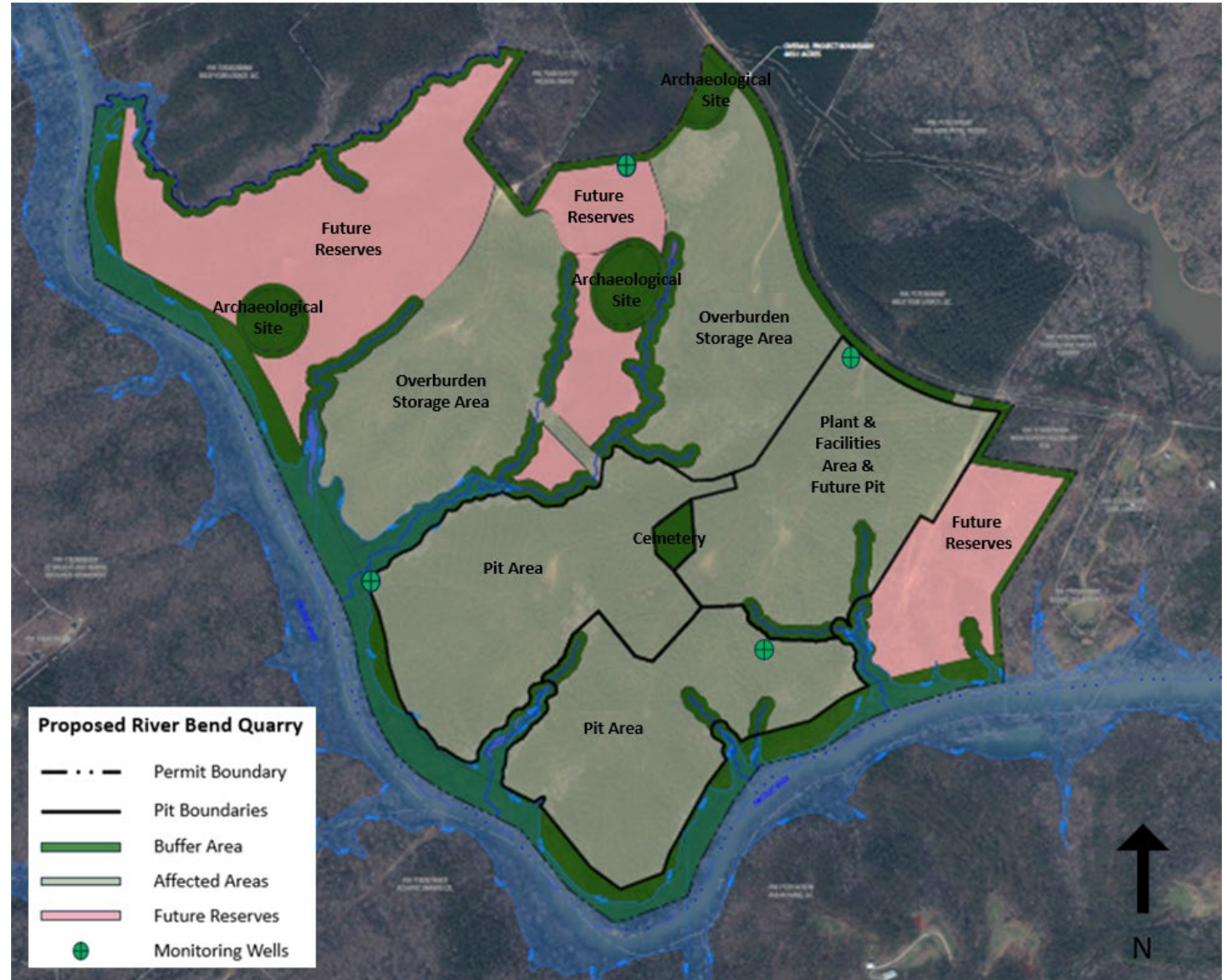
Total Area: 443.1ac

Affected Area: 241.1ac

Buffer: 105.9ac

Future Reserves: 95.8

Prior to the initiation of activity in future reserves, the operator shall submit detailed mine and reclamation plans to DHEC for approval and adjust reclamation costs to cover proposed activities.



Proposed Mining Process

- Installation of Best Management Practices (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



Silt fence



Brush Barrier



Stormwater Basin



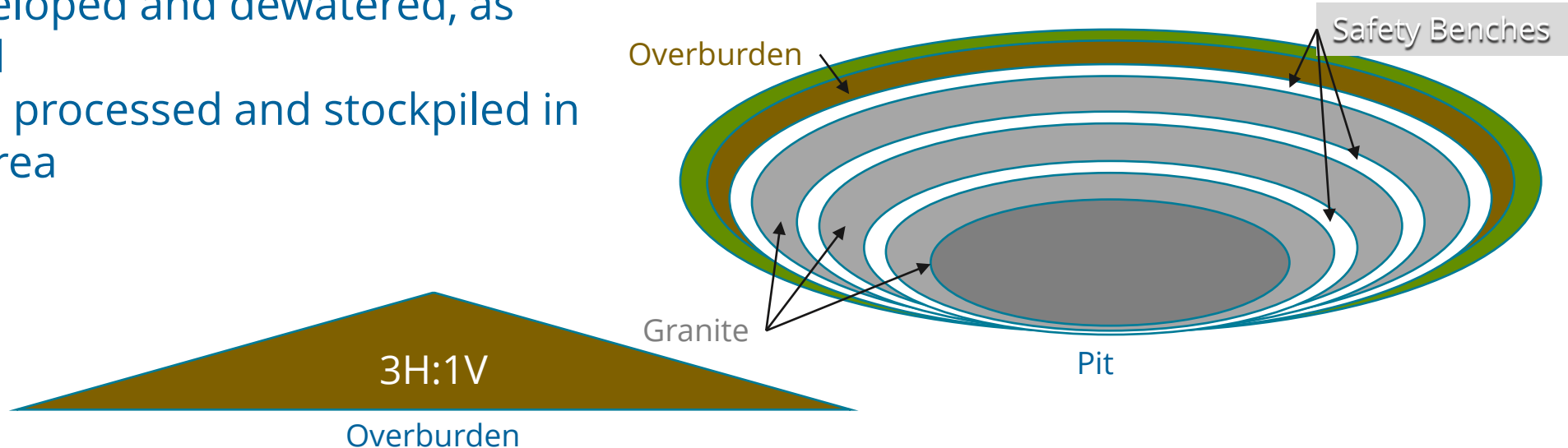
Water Truck



Check Dams

Proposed Mining Process

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Example of a granite quarry excavating ore

Proposed Mining Process (cont.)

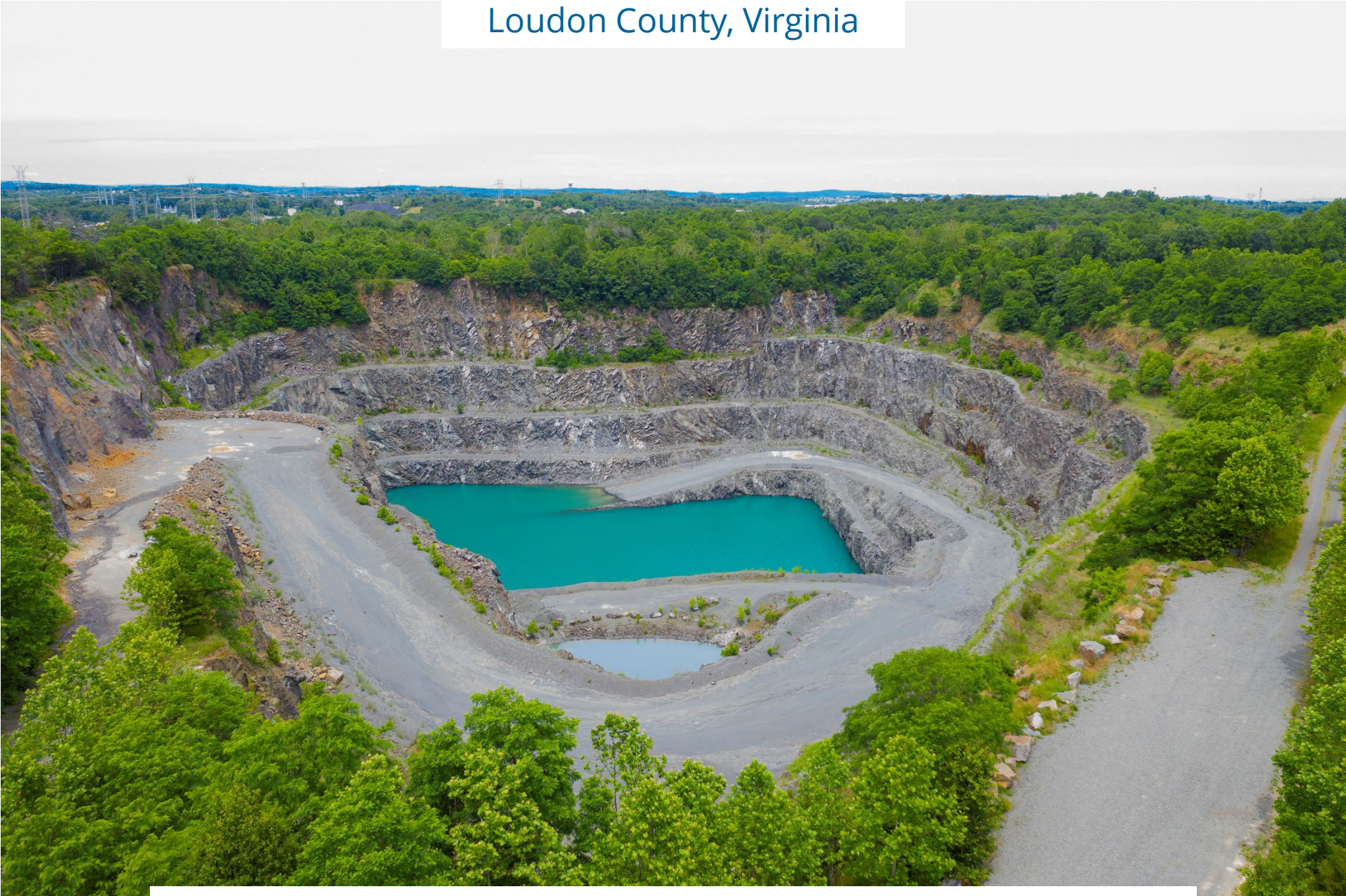
- Maximum proposed depth: 500ft.
- Applicant requests permission to blast
 - Landowners with structures within a half-mile of blasting will be offered a pre-blast survey

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

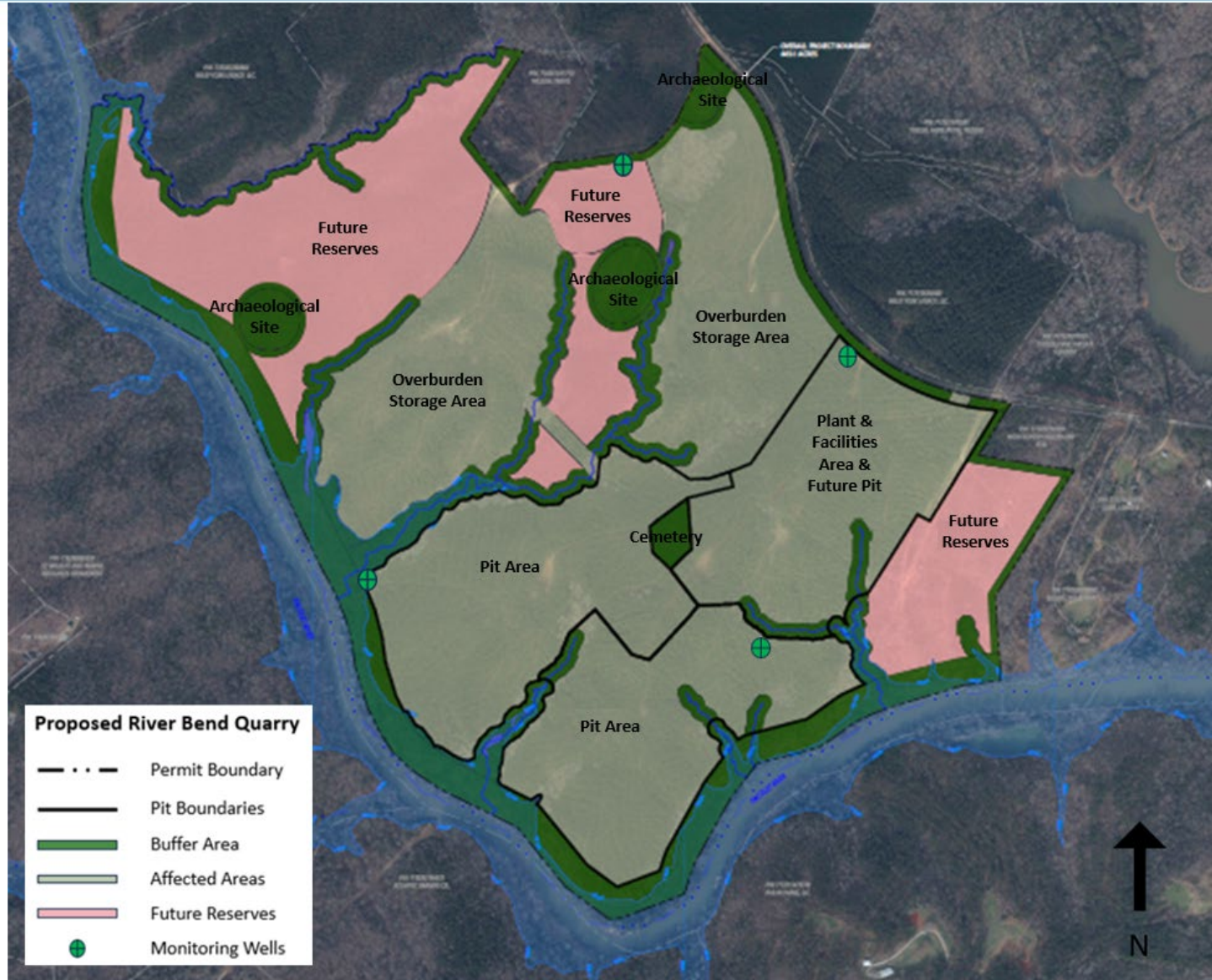


Other DHEC Requirements

- 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 Notifications

- MSHA- Mine Safety and Health Administration
- USFW- US Fish and Wildlife
- DNR – SC Department of Natural Resources
- SHPO-State Historic Preservation Office
- SCDOT – SC Department of Transportation
- Spartanburg County Administrator



Common Concerns

- General blasting concerns
- Dewatering
- Dust
- Noise
- Public Safety
- Concerns DHEC cannot consider during permitting

Blasting

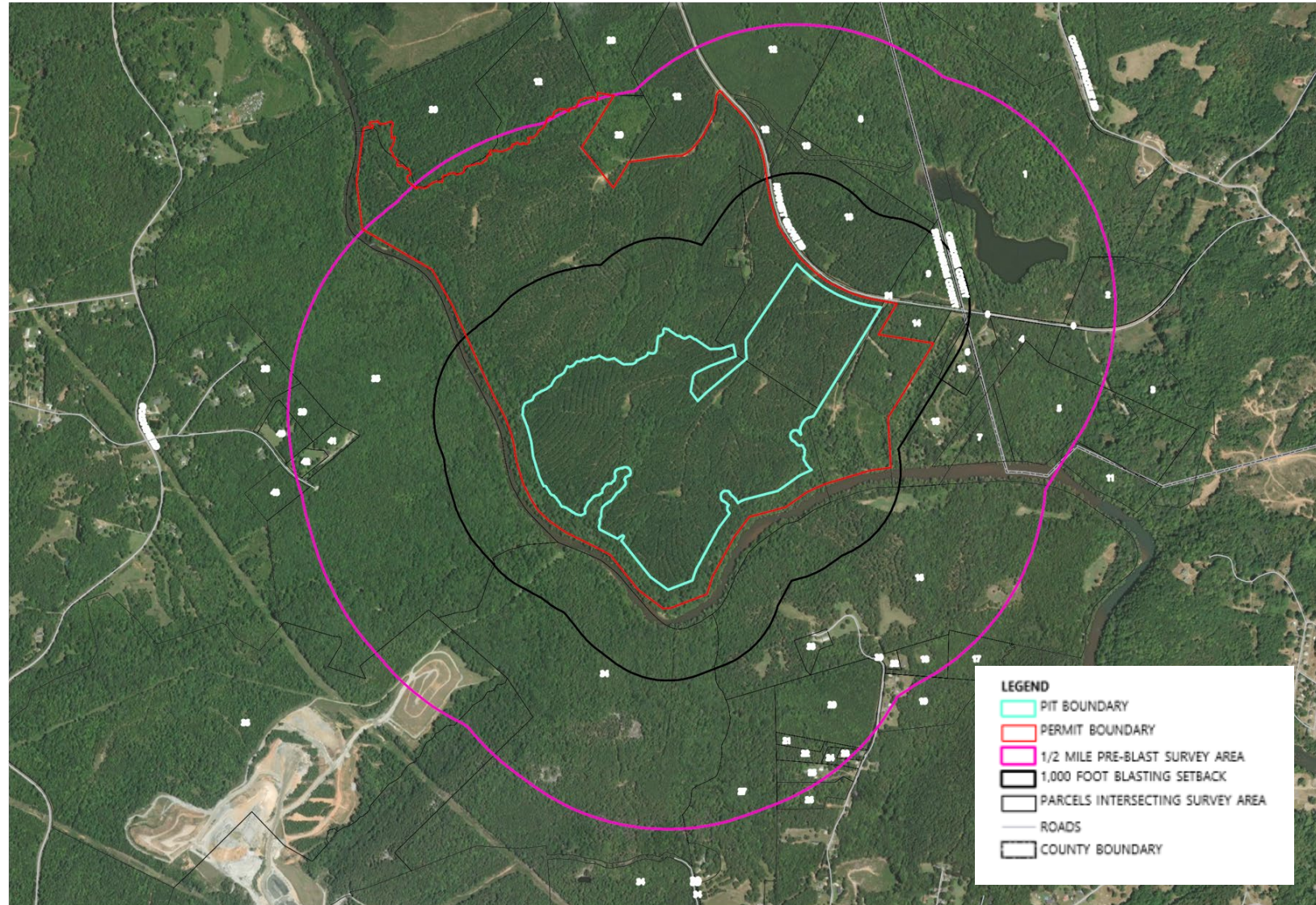
Typically, 2-4 times a month

"...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.

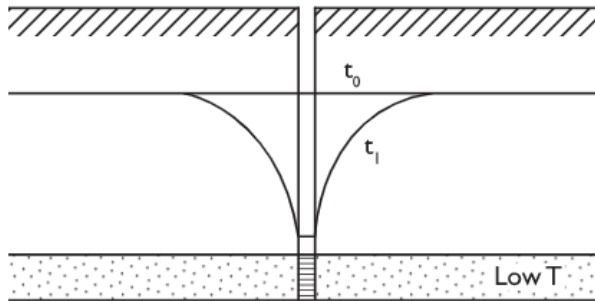
All residences >1,000ft from blasting



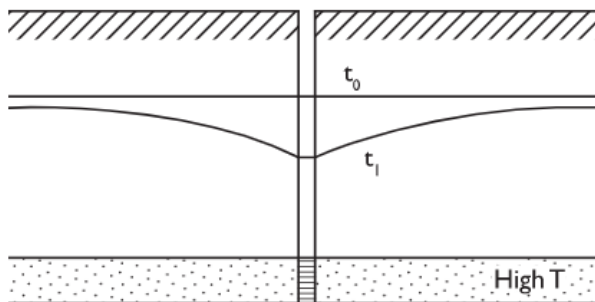
Dewatering

Maximum Depth: 590ft.

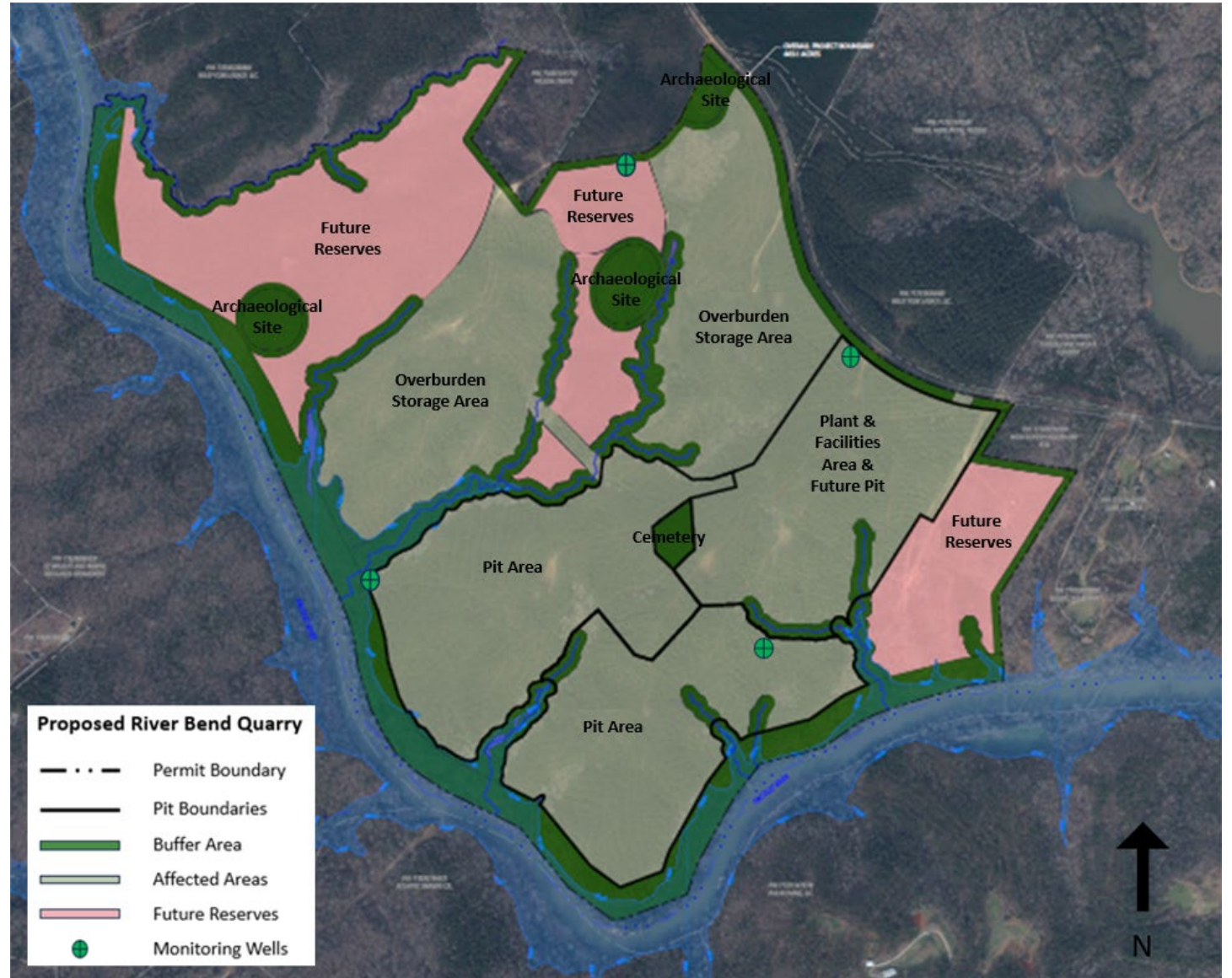
Primary Dewatering Layer: Granite



(a)



(b)



Dust

- Water trucks
- Dust suppressants/crusting agents
- Vegetative cover

Noise

- Equipment
- Topography
- Buffers/berms
- Noise standards for worker safety

Public Safety

- Controlled Access
- Gated Entry/Warning Signs
- Natural & Constructed Barriers



Other Concerns

Truck Traffic

- SC DOT District 3: David Herbert, Administrator (864) 241-1010
- SC Public Service Commission District 4: (803) 896-5100
- Spartanburg County Commission of Public Works: Travis Brown (864) 595-5320

Property Value/Zoning

Spartanburg Planning & Development: 366 N Church St, Main Level, Suite 700
Spartanburg, SC 29303; (864) 596-3570

Next Steps

- The Bureau of Land & Waste Management (BLWM) will review all comments received and conclude the technical review for the mine operating permit.
- BLWM 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

January 26, 2024 to:

Sarah Harris
DHEC/BLWM
2600 Bull Street
Columbia, SC 29201
harris1@dhec.sc.gov

Additional information can be found at:

www.scdhec.gov/RiverBendQuarry



DHEC Staff

Bureau of Land & Waste Management Division of Mining & Solid Waste Management

Marty Lindler Division Director

Jeremy Eddy, PG Section Manager

Sarah Harris Project Manager

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 Columbia Office

Natalie Kirkpatrick Area Director

Betsy Seals & Benjamin Whitmire Office Managers



South Carolina Department of Health and Environmental Control

River Bend Aggregates, LLC
Draft Synthetic Minor Air Construction Permit
Bureau of Air Quality

Project Overview

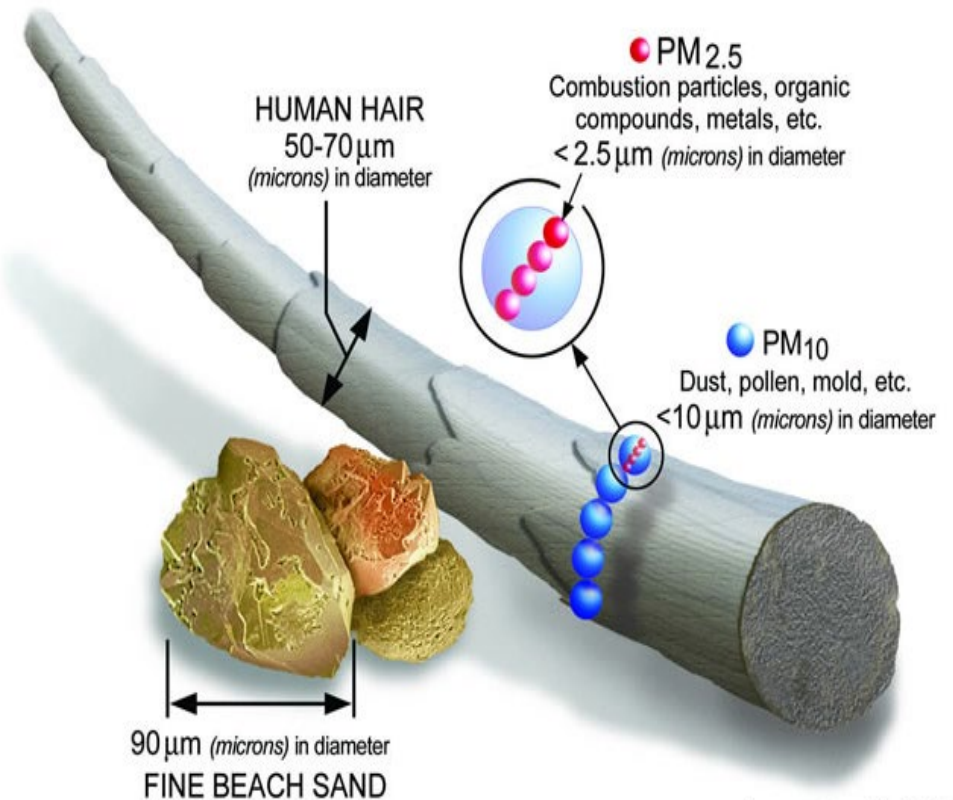
- 550 tons per hour Stone Processing Plant
 - Process Equipment
 - Crushers
 - Screens
 - Conveyors
- Additional sources of dust generated onsite
 - Plant and Customer Haul Roads
 - Storage Piles

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 with wet suppression (the controlled emissions) are below major thresholds

Particulate Matter

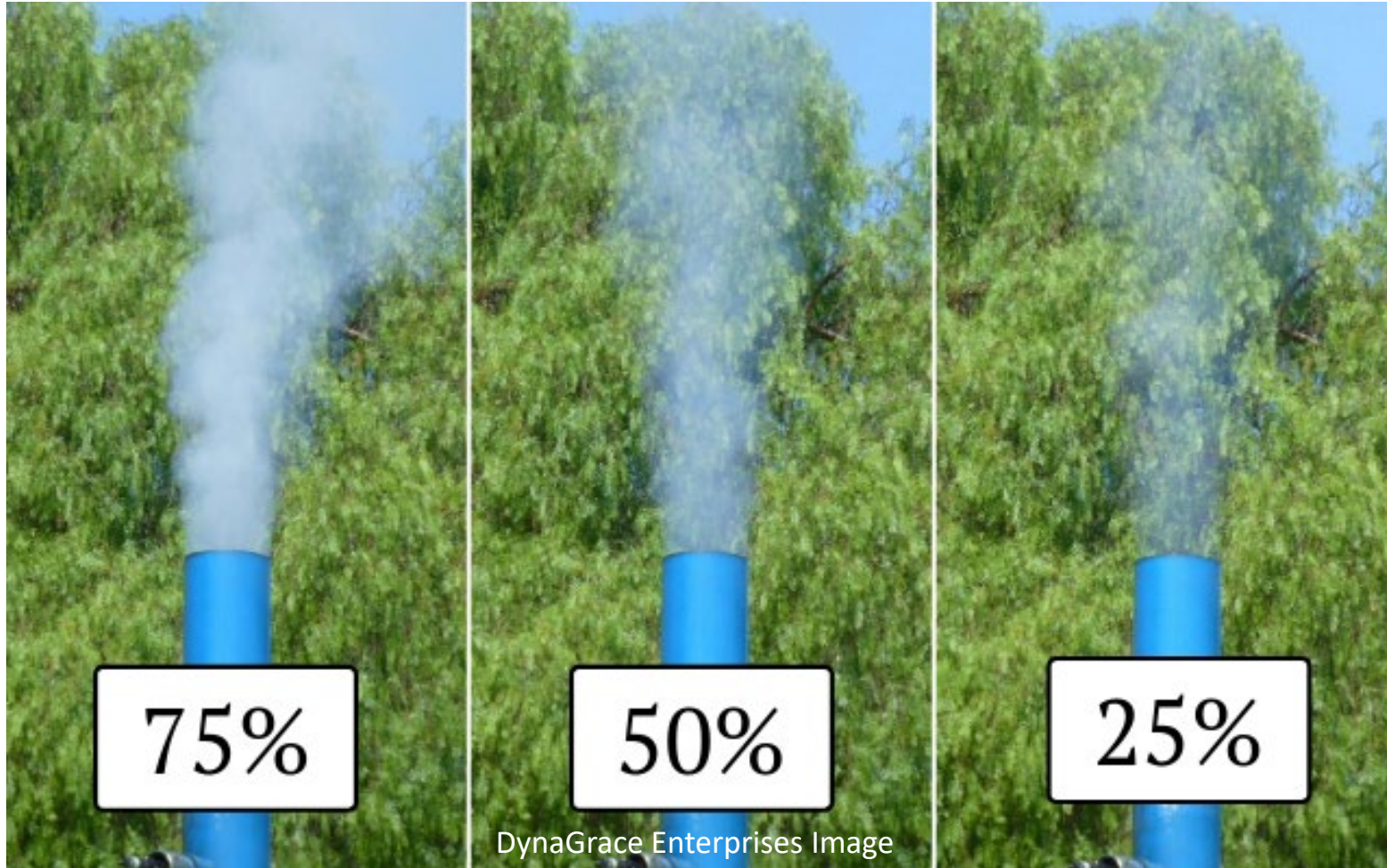
- Mixture of solid particles and liquid droplets
- PM_{10} : Inhalable particles, with diameters 10 microns (μm) and smaller
- $PM_{2.5}$: Fine inhalable particles, with diameters 2.5 μm and smaller



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



Air Quality Analysis

Air Pollutant	Max Facility Predicted Concentration ($\mu\text{g}/\text{m}^3$)	Location Background Concentration ($\mu\text{g}/\text{m}^3$)	Total Concentration ($\mu\text{g}/\text{m}^3$)	State/Federal Standard ($\mu\text{g}/\text{m}^3$)	Meets Standard?
PM ₁₀ 24-hr	67.69	30	98	150	Yes
PM _{2.5} 24-hr	7.00	15.4	22	35	Yes
PM _{2.5} Annual	1.91	7.7	10	12	Yes

The total concentration (facility predicted + background) is below the National Ambient Air Quality Standard for each pollutant.

Onsite Dust Control

Dust control plan to be submitted prior to operation

- Addresses onsite truck traffic, storage piles, and process equipment
 - Crusher, screens, and conveyors equipped with a water spray system
 - Onsite truck traffic dust is controlled by water trucks

Draft Synthetic Minor Air Construction Permit

- State and Federal Regulations are established to be protective of the environment and public health
- Recordkeeping, reporting and/or testing requirements to demonstrate compliance
- Restricts emissions to less than 250.0 tons per year (tpy) of PM and less than 100.0 tpy of PM₁₀ to avoid major source thresholds

Next Steps In BAQ Process

- Review all comments received during the public comment period
 - Ends January 26, 2024
- Make a final permitting decision, provide notification and a written response to all comments to everyone on mailing list
- Final decision date begins 15-day appeal period



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