

Proposed Fairfield Quarry **PUBLIC HEARING**

- ✓ To avoid echoing or feedback, all lines are muted.
- ✓ At the end of the presentation, we will unmute and call upon those who signed up to speak.
- ✓ This virtual hearing 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: **244910265#**



Exits the hearing. (If you accidentally exit the hearing, you can rejoin.)



Be smart. Stay 6 feet apart.

scdhec.gov/COVID19



Stop the Spread of COVID-19



Wash
hands often



Stay home
while sick



Cover coughs
and sneezes



Clean
surfaces often

scdhec.gov/COVID19





Proposed Fairfield Quarry

Mine Operating Permit
Application I-002297

Fairfield County

PUBLIC HEARING



Agenda

- Gathering Time & Instructions for Participating Remotely
- Introductions & Opening Remarks
- DHEC Presentations
- Public Comments
- Closing Remarks
- Hearing Adjourned

An informal Question & Answer Session will be held immediately following the public hearing.

Mining Topics

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

March
18, 2020

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

April
09, 2020

- DHEC-MR Publishes Initial Public Notice
- DHEC-MR Agrees to a Public Hearing
- Begins Technical Review

August
27, 2020

- DHEC holds a Public Hearing
- **Comment Period Ends September 11, 2020**
- Technical Review Continues

TBD

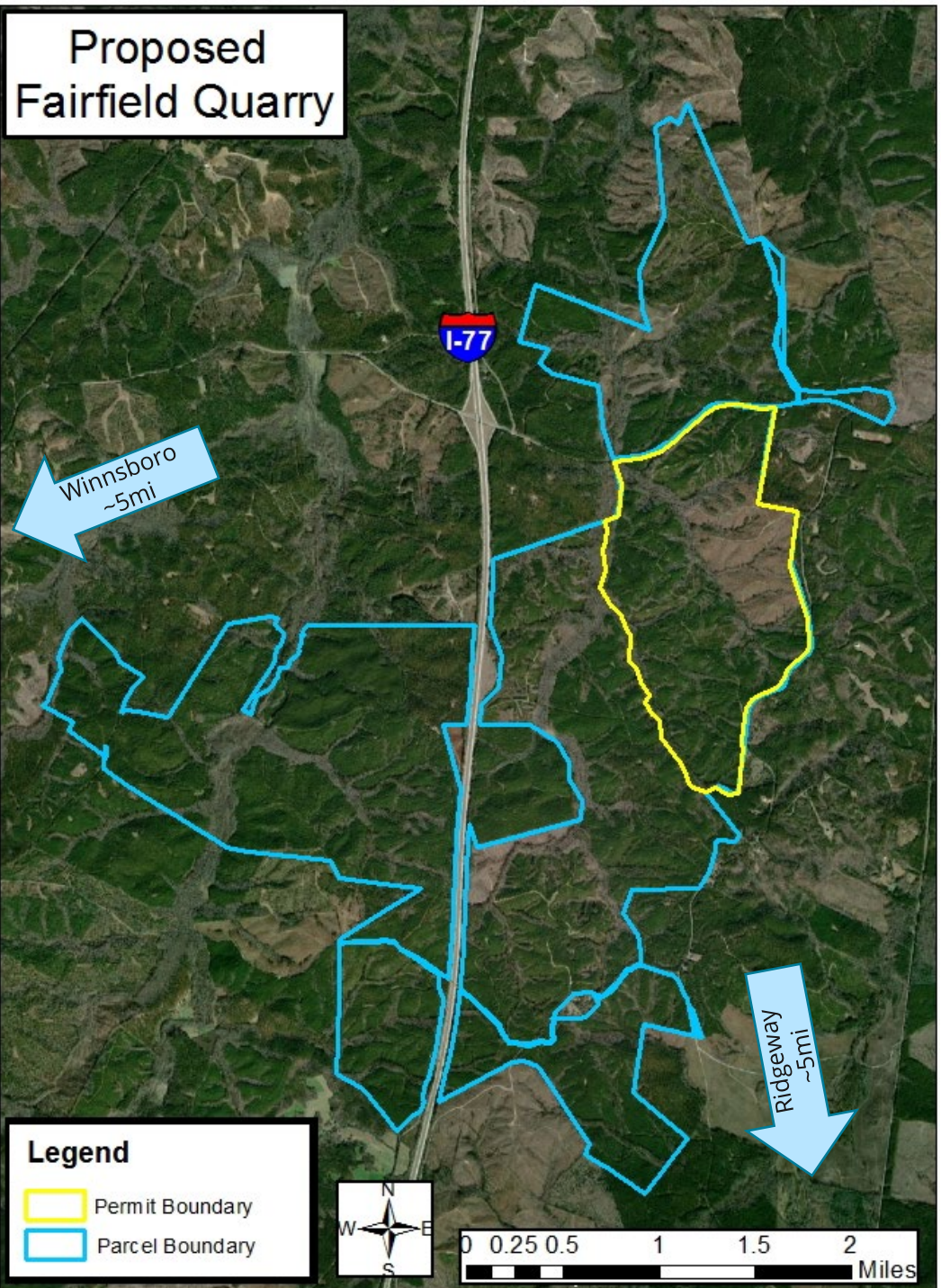
- Draft Permit will be Available for Public Review
- 15 Day Comment Period Starts

TBD

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

TMS# 110-00-00-004.000
Total Area: 5,055.64ac
Land Use: Managed Timberland
Owner: Weyerhaeuser Corp.

Proposed Quarry
Total Area: 924.1ac



Proposed Permitted Area

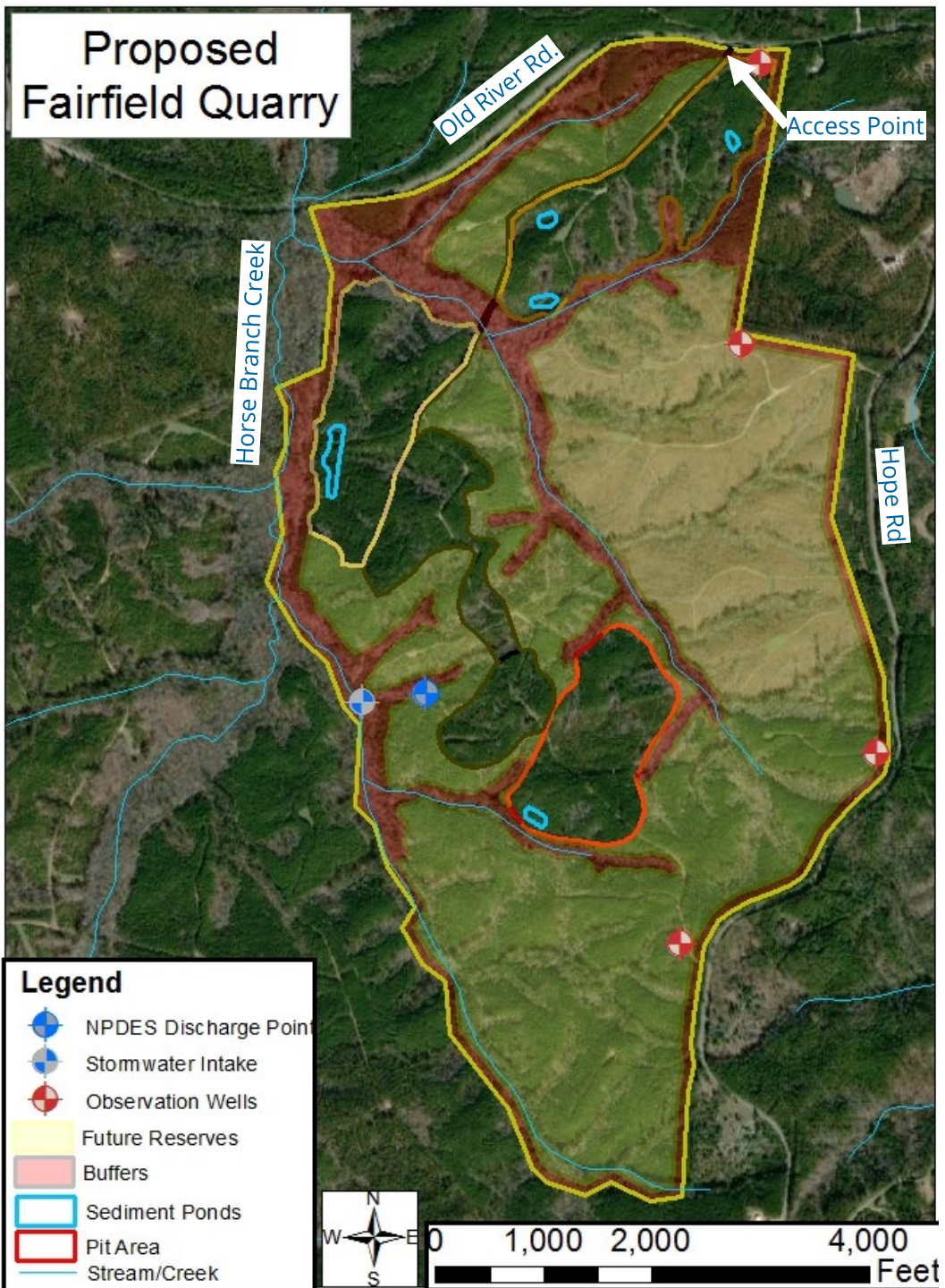
Total Area: 924.1ac

Affected Area: 201.8ac

Buffer: 199.4ac

Future Reserves: 522.9ac

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



Proposed Permitted Area

Total Area: 924.1ac

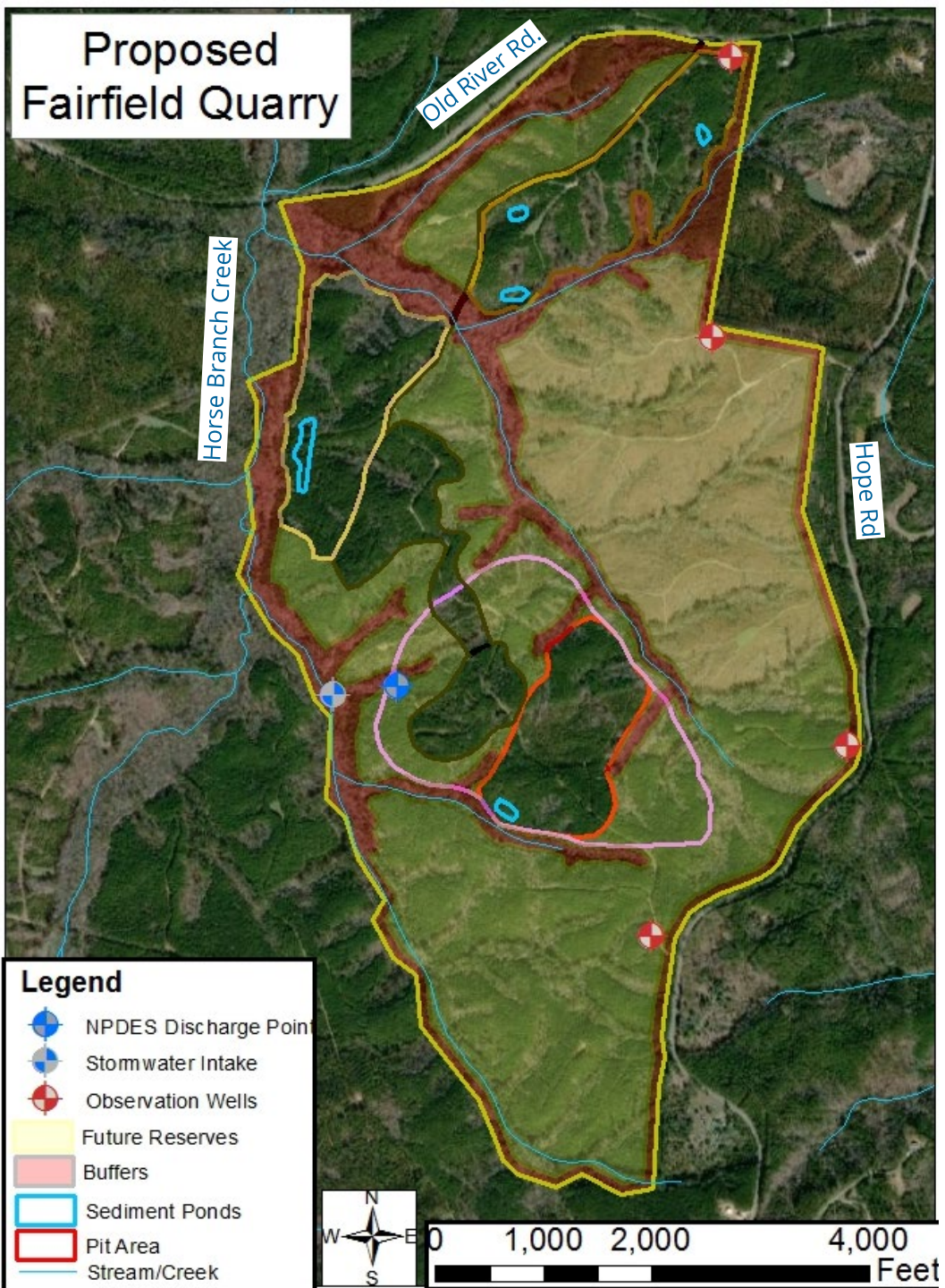
Affected Area: 201.8ac

Buffer: 199.4ac

Future Reserves: 522.9ac

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

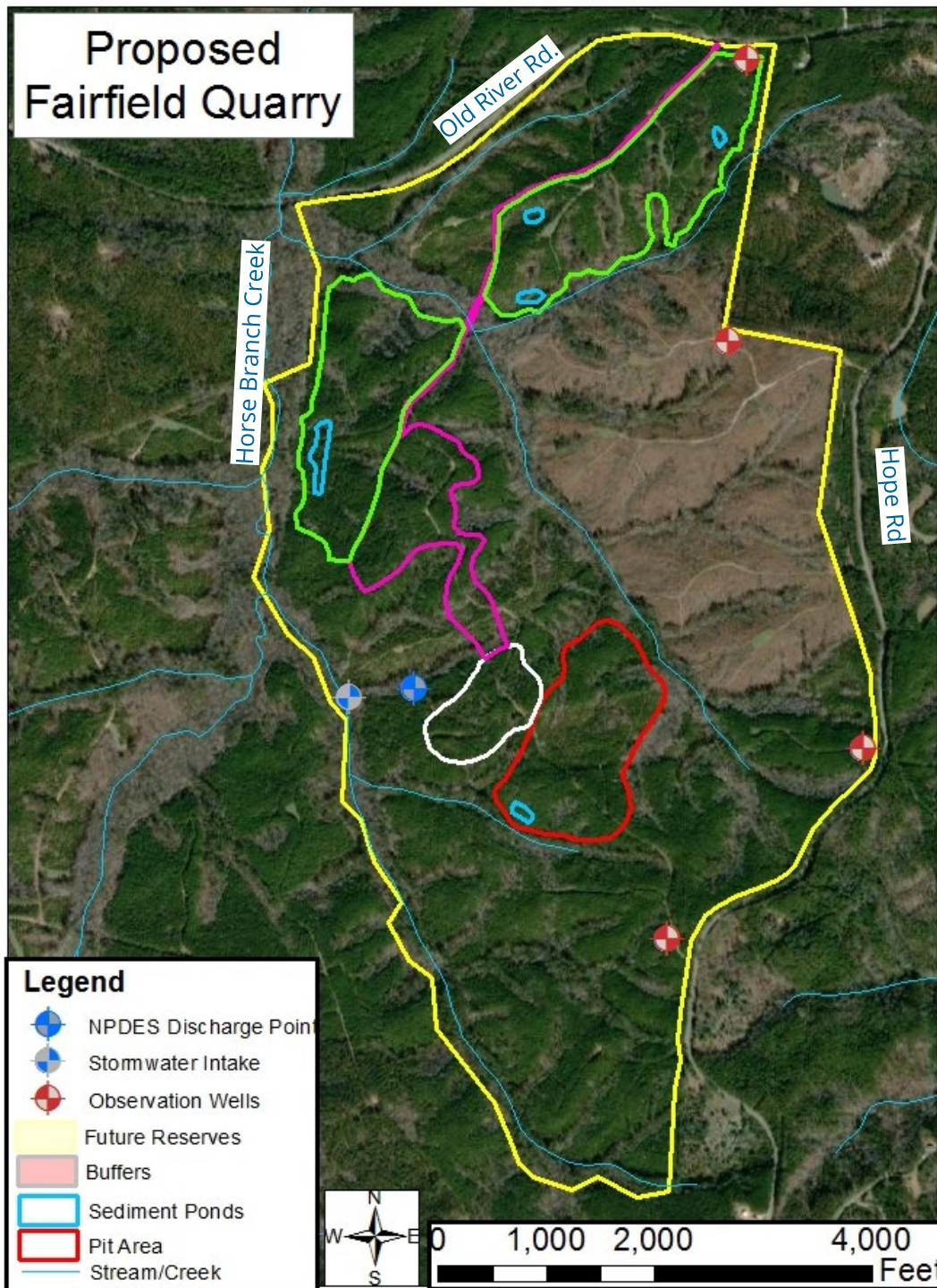
Total Area: 924.1ac

Affected Area: 201.8ac

Buffer: 199.4ac

Future Reserves: 522.9ac

- Green - Overburden Stockpile Area
- Red - Pit Area
- White - Plant and Process Material Area
- Fuchsia - Office, Scale House, Maintenance Area, and Haul Road



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



Silt fence



Brush Barrier



Stormwater Basin



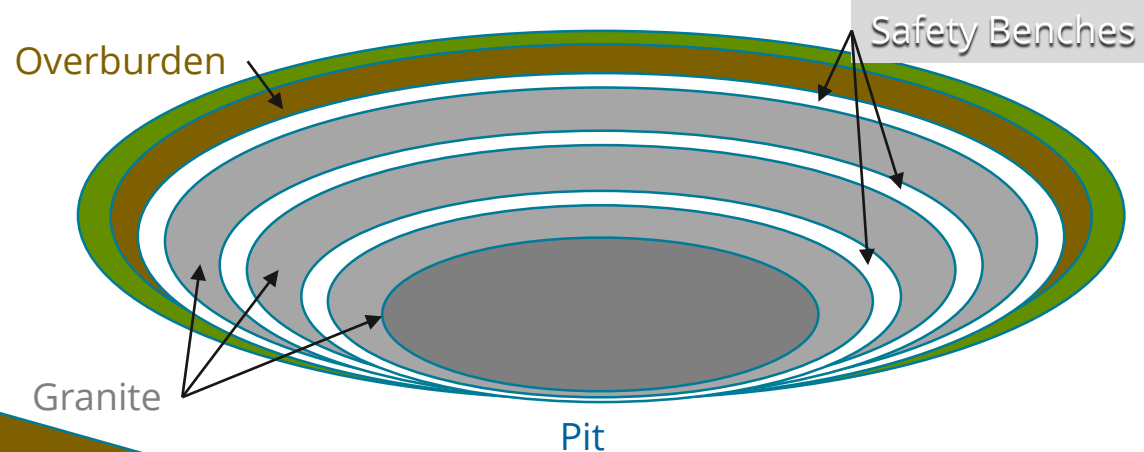
Water Truck



Check Dams

Proposed Mining Process

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- Pit developed and dewatered, as needed
- Granite processed and stockpiled in plant area



3H:1V

Overburden



Proposed Mining Process (cont.)

- Maximum proposed depth: 400ft.
- 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

Quarry Park
Winston-Salem, N.C.



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
 - no concerns
- US Fish & Wildlife
 - no concerns
- SC Department of Natural Resources
 - comments received on May 8, 2020
 - conducted site visit with applicant to address comments
 - DNR offered no additional comments

Community Concerns

- Blasting will have a detrimental effect on Hope Road, private driveways, neighboring houses, and Good Hope Baptist Church.
- Dewatering will lessen the groundwater supply for nearby residents.
- Vulcan does not meet local zoning ordinances in regards to accessing Old River Road with their entrance.
- Increased truck traffic will destroy roads.
- Vulcan cited by Tennessee Department of Environment and Conservation (TDEC) for deposition of limestone in nearby streams.
- Mining Act 48-20-70: *The department shall deny an operating permit upon finding that:*
 - *6. previous experience with similar operations indicates a substantial possibility that the operation will result in substantial deposits of sediments in stream beds or lakes....*

Blasting

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

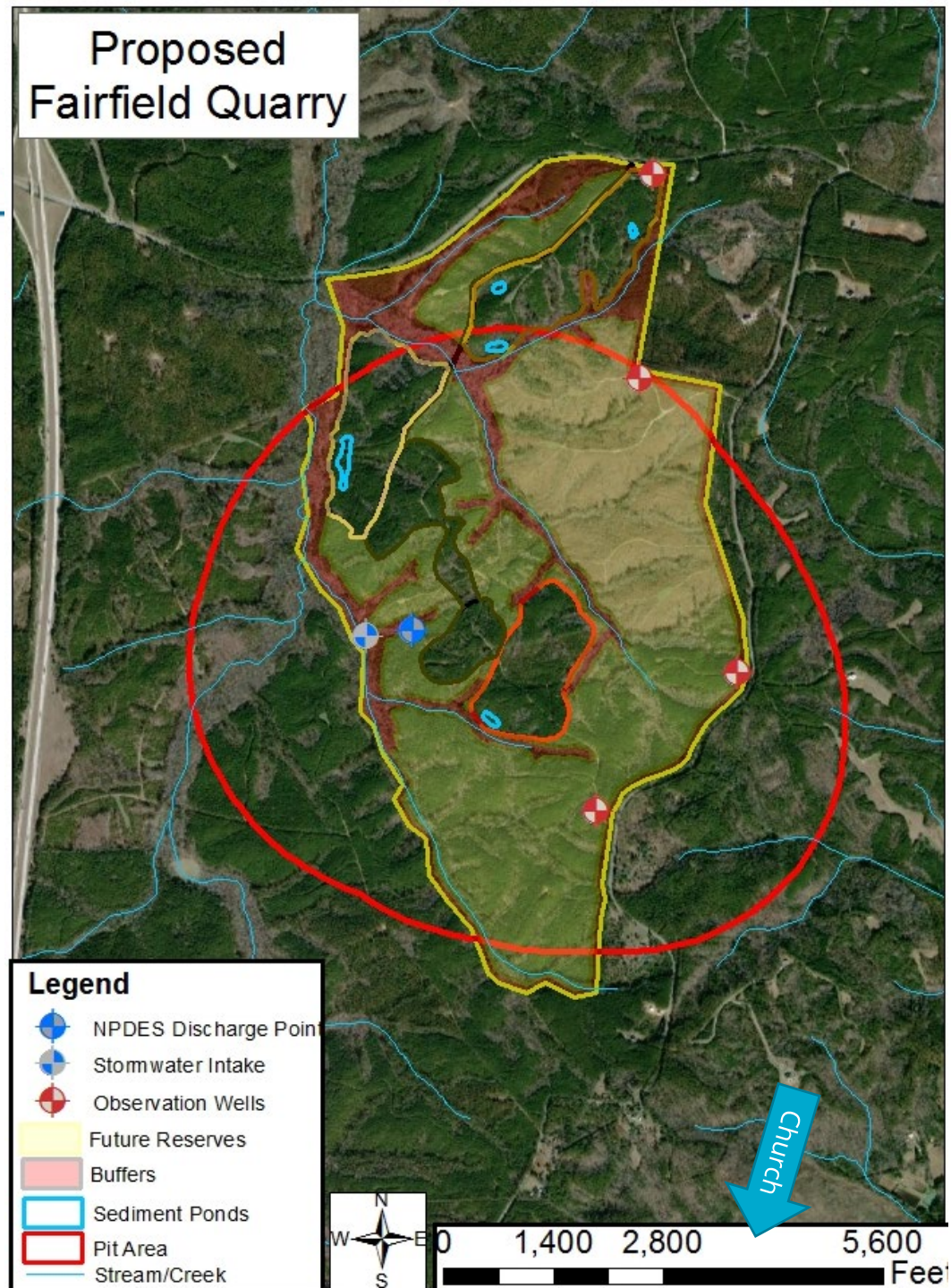
DHEC limits maximum particle velocity to 1.0in/sec.

All public roads >1,000ft from blasting

Only one apparent structure within the half-mile blast radius

Good Hope Baptist Church ~1.5mi from blasting

Proposed Fairfield Quarry



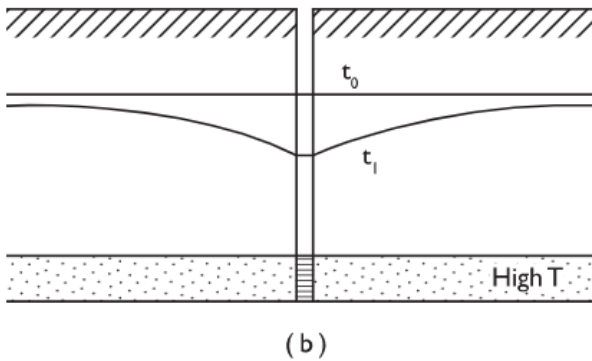
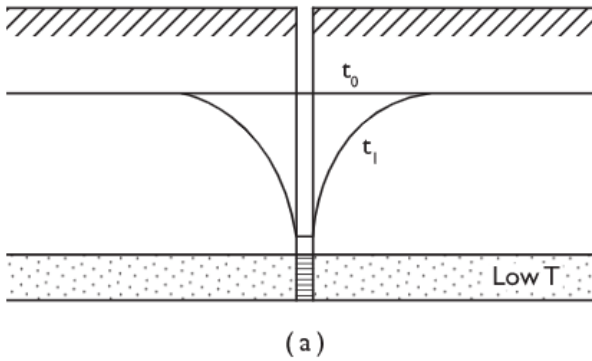
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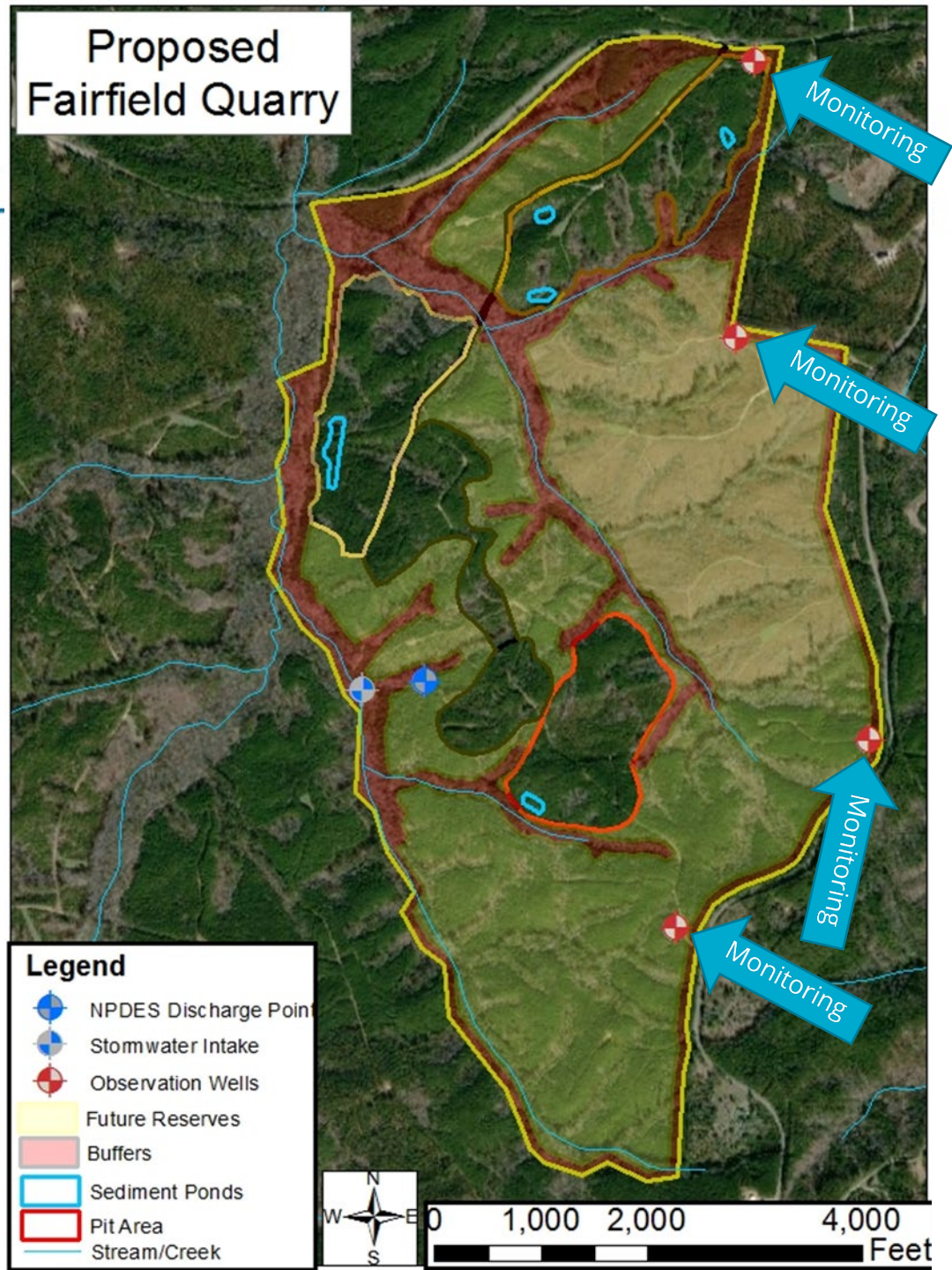
Dewatering

Maximum Depth: 400ft.

Primary Dewatering Layer: Granite



Proposed Fairfield Quarry



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Zoning/Local Ordinances

- S.C. Mining Act Section 48-20-250
 - Can not supersede or interfere with any local zoning regulation or ordinance
- Fairfield County is responsible for the enforcement of its own local ordinances and zoning laws.

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

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TDEC – Kingsport Quarry

Material: **Limestone**

- Highly susceptible to chemical weathering and dissolution
- Sediment is transported easier via seeps and deposition into streams.

Material was placed in the 1960s/1970s with little to no environmental engineering.

Proposed Fairfield Quarry

Material: **Granite**

- Not very susceptible to chemical weathering or dissolution
- Sediment transport would be aboveground and easier to observe, inspect, and prevent.

Modern engineering practices and BMPs minimize and prevent sediment transport and deposition.

Conclusion: These two sites are not similar enough to indicate that the proposed operation would result in substantial deposits of sediment in stream beds or lakes, landslides, or acid water pollution.

Next Steps

- DHEC will review all comments received and conclude the technical review.
- A draft permit will be available for public review. There will be a 15 day comment period for this 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.

Draft Synthetic Minor Air Construction Permit

Permit Writer: Mareesa Singleton

Air Permitting Topics

- General Information
- Project Overview
- Draft Air Construction Permit
- Particulate Matter
- Onsite Dust Control
- Next Steps

General Information

- Proposed new granite quarry and processing plant
 - SC Highway 77/State Road SC S-20-41 in Winnsboro SC

Project Overview

- 550 tons per hour Stone Processing Plant
 - Process Equipment
 - Crushers
 - Screens
 - Conveyors
 - Storage Bins
 - Water Pumps
 - Additional sources of dust generated onsite
 - Plant and Customer 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 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
- PM_{2.5}: Fine inhalable particles, with diameters 2.5 microns (μm) and smaller

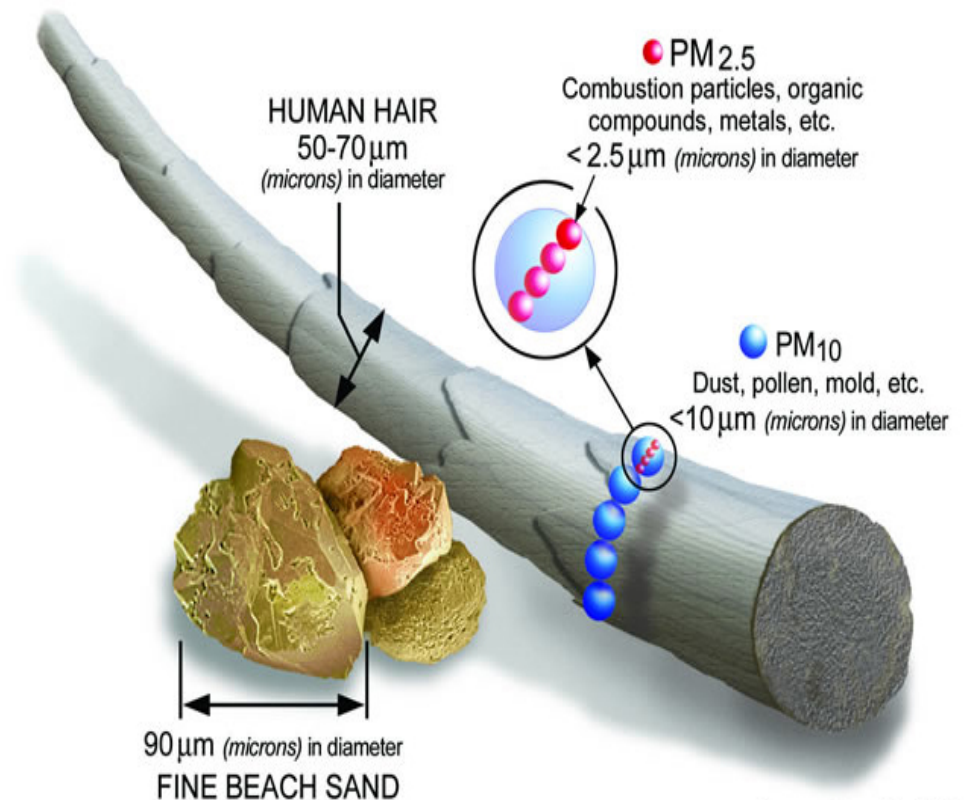


Image courtesy of the U.S. EPA

Example of Opacity

20% Opacity



40% Opacity



80% Opacity



source: auburnsys.com

Draft Air Construction Permit

- Federal Regulation Opacity Limits
 - Required to test equipment to demonstrate compliance with opacity limits
 - 7% opacity limit for screens, conveyors, and storage bins
 - 12% opacity limit for crushers

Draft Air Construction Permit

- Air Quality Analysis
 - Pollutants: PM_{10} and $PM_{2.5}$
 - Controlled emissions for each source is less than 1.14 pound per hour and exempt from modeling

Onsite Dust Control

- Dust control plan to be reviewed prior to operation
 - Addresses truck traffic, storage piles, and process equipment
 - Maintenance Checks

Air Construction Permit

- Applicable State and Federal Regulations
- Recordkeeping, reporting and/or testing requirements that demonstrate compliance
- Synthetic Minor construction permit restricts facility wide emission to avoid major source thresholds:
 - Less than 250.0 tons per year for PM
 - Less than 100.0 tons per year for PM₁₀

Next Steps

- 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 11, 2020 to:

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

Additional information can be found at:

www.scdhec.gov/Vulcan

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At the end of the presentation, we will unmute and call upon those who signed up to speak.



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- ✓ Commenters will be called on in random order
- ✓ Please state your first and last name
- ✓ How to unmute your line:



Muted
(no one in the meeting
can hear you)



Unmuted
(everyone in the
meeting can hear you)



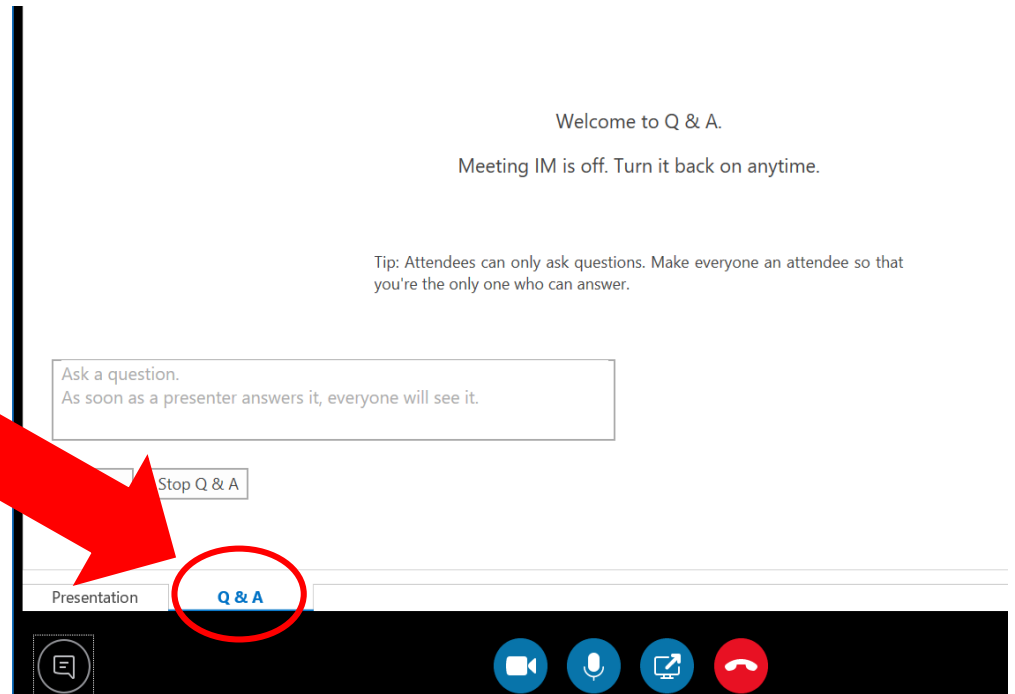
Call in option

Phone number: (864) 558-7311 | Access Code: 244910265#

Question & Answer Session

You can verbally ask questions using your computer's microphone or your phone.

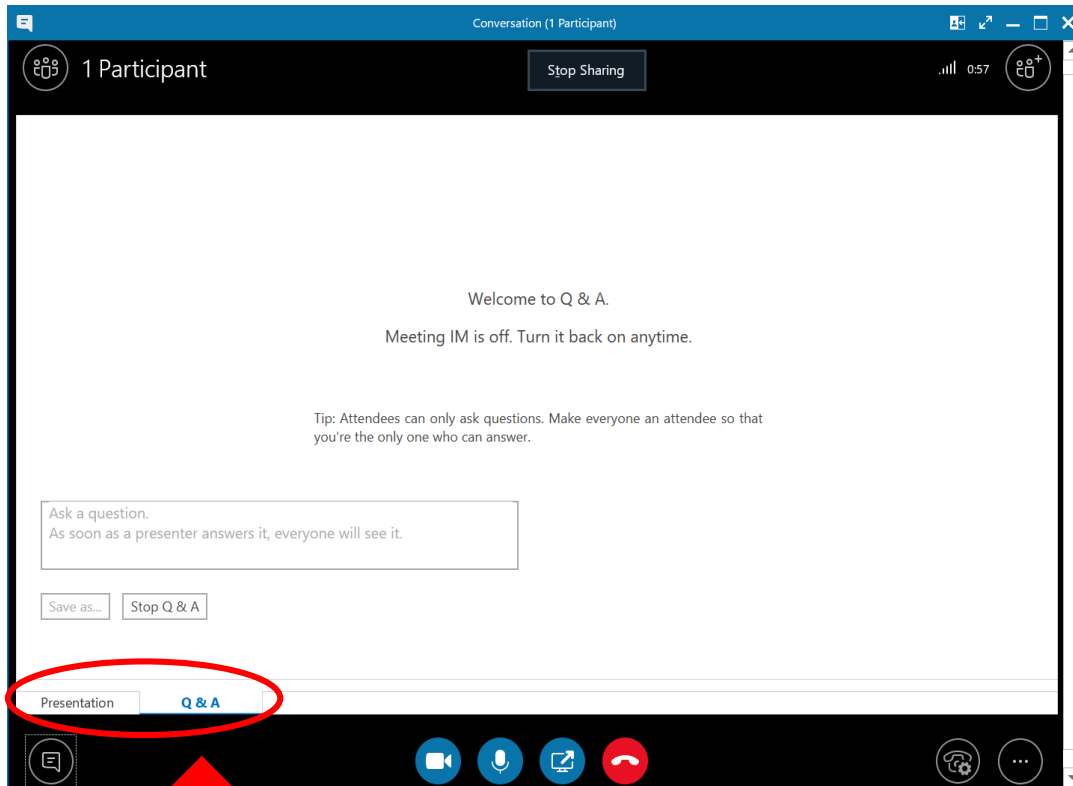
You can also use the Q & A Board to enter your questions.



Call in option

Phone number: 1 864-558-7311 | Access Code: 244910265#

Questions



Use the Q & A Board to enter your questions.

A facilitator will read questions posted on the Q & A Board.

Question & Answer Session

- ✓ Will include oral and written questions
- ✓ Unmute to indicate you would like to speak
- ✓ Unmuted lines will be called on to speak



Muted
(no one in the meeting
can hear you)



Unmuted
(everyone in the
meeting can hear you)



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Phone number: **1 864-558-7311** | Access Code: **244910265#**

DHEC Staff

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