

Erosion and Sedimentation Control on Mine Sites

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NC DENR – DEMLR RRO

Before we get to the E&SC...

There are major differences in the application and review process for a mine permit that you should be aware of

Mine Permit Requirements

- When is a mine permit required?

A mine permit is required if 1 or more acres of land are affected by mining activity (excavation, access/haul road, stockpiles, E&SC, etc.)

- Exemptions:

- On-site construction or farming
- DOT contractor borrow pits (conditional)
- Single project borrow pits (covered by the SPCA)

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Important: You cannot have a mine permit and E&SC plan approval on the same footprint!

Regional Office Staff
conduct inspections



Central Office Staff (permitting):

Janet Boyer, PE	State Mining Specialist
Judy Wehner	Assistant Mining Specialist
Brenda Harris	Administrative Assistant

Mine Permit Application Process

- Along with the required processing fee, a complete application and associate mine maps are submitted to the Central Office. These items fully describe the mine activities as well as proposed reclamation of the site.
- Adjoining landowners (and county/city officials) must be notified of the proposed mine activity. If there is significant public interest in a project, the Division Director may call for a public hearing on the application.

Mining fee schedule

	<u>0-25 acres</u>	<u>26+ acres</u>
New Permit Applications	\$3,750.00	\$5,000.00
Major Permit Modifications	\$750.00	\$1,000.00
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E&SC Plans: \$65/acre or any part thereof



Interagency Review



Mine Permit Review Process

- The DEMLR Mining Program compiles and reviews comments from other agencies and Regional Office field staff
- By statute, we have a 60 day review clock.
 - Our goal is to have the initial review complete within 30 days
- If additional information is needed to continue review of the application, a certified letter is sent to the applicant. The applicant has up to 180 days to respond to our request.

Seven Denial Criteria

1. That any requirement of this Article or any rule promulgated hereunder will be violated by the proposed operation.

This means that the very nature of the activity proposed in the application will immediately violate any of the basic requirements of the Act and corresponding Administrative Rules.

Seven Denial Criteria

2. That the operation will have unduly adverse effects on potable groundwater supplies, wildlife, or fresh water, estuarine, or marine fisheries

NC Wildlife Resources
Commission
US Fish and Wildlife Service
Division of Water Resources
Division of Marine Fisheries



Seven Denial Criteria

3. That the operation will violate standards of air quality, surface water quality, or groundwater quality that have been promulgated by the Department



Division of Water
Resources
Division of Air Quality

Seven Denial Criteria

4. That the operation will constitute a direct and substantial physical hazard to public health and safety or to a neighboring dwelling house, school, church, hospital, commercial or industrial building, public road or other public property, excluding matters relating to use of a public road

Slopes – Active and Final
Blasting
Access (Fencing, etc.)
Buffers



Seven Denial Criteria

5. That the operation will have a significantly adverse effect on the purposes of a publicly owned park, forest or recreation area



Division of Parks
& Recreation

Seven Denial Criteria

6. That previous experience with similar operations indicates a substantial possibility that the operation will result in substantial deposits of sediment in stream beds or lakes, landslides, or acid water pollution

Land Quality
Section
Central and
Regional Office
Staff



Seven Denial Criteria

7. That the applicant or any parent, subsidiary, or other affiliate of the applicant or parent has not been in substantial compliance with this Article, rules adopted under this Article, or other laws or rules of this State for the protection of the environment or has not corrected all violations that the applicant or any parent, subsidiary, or other affiliate of the applicant or parent may have committed under this Article or rules adopted under this Article and that resulted in:
 - a. Revocation of a permit,
 - b. Forfeiture of part or all of a bond or other security,
 - c. Conviction of a misdemeanor under G.S. 74-64,
 - d. Any other court order issued under G.S. 74-64, or
 - e. Final assessment of a civil penalty under G.S. 74-64.

The Operator's record with the Mining Program and NCDENR as a whole

Mine Permit Issuance

- In the absence of these seven denial criteria (or if they are satisfactorily mitigated), a permit shall be granted.
 - An acceptable reclamation Bond must be posted
 - Based on type of mine operation, total (and types) of affected acreage, length of permit, and method of reclamation
 - A blanket bond (\$500,000.00) may be posted
 - Permit is good for up to 10 years
 - Notice of permit issuance is sent to all adjoining landowners, city/county officials, etc. In addition, they are all notified of their right to appeal the issuance of the permit.

Major Process Differences

Mining

- Application submitted to Central Office

E&SC (Construction)

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- Interagency Review Coordinated by LQS
- 60 day review clock (but can be extended if additional information is needed)

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- Application submitted to Regional Office; fee is per acre
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- 30 day review clock to approve or disapprove (15 on revised plan)

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E&SC for Mines is similar to E&SC for Construction sites

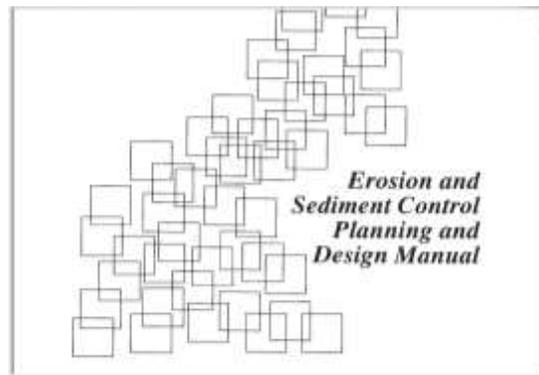
E&SC Measures for Mines:

- Sediment Fence
- Check Dams
- Temporary Sediment Traps
- Rock Dams
- Sediment Basins
- Outlet Stabilization
- Inlet Protection
- Etc.

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- Temporary Sediment Traps
- Rock Dams
- Sediment Basins
- Outlet Stabilization
- Inlet Protection
- Etc.

Mines Use the Same Design Criteria Reference



It's the same...but different



So what's different?

- The length of the project
- How buffers are used for sediment control
- How wetland buffers are treated
- Measures may be designed differently
- Bonding
- Stormwater permits are different

Length of Time Project is Active

Mines - Decades



Construction - Months



Design Criteria

Mines:

- Permanent (greater than 1 year)
 - Designed for 25 year/24 hour storm event
- Temporary (up to 1 year)
 - Designed for 10 year/24 hour storm event
- Surface Area/Trapping Efficiency is based on 10 year storm for both temporary and permanent measures

Construction:

- Temporary – typically 10 year design storm

How are Buffers Treated?

- Mine buffers may not be used as a measure
- Construction buffers may use the first 25% to collect sediment



Mine Buffers

- | | |
|---|---|
| <p>Unexcavated:</p> <ul style="list-style-type: none"> ● May be used along adjoining property ● May include roads, berms, stockpiles ● May not be used along streams or wetlands | <p>Undisturbed:</p> <ul style="list-style-type: none"> ● Used to protect streams and wetlands ● May not be disturbed ● May not include roads, berms, stockpiles |
|---|---|

Wetland Buffers

Mines:

- Minimum of 50 feet undisturbed buffer

Construction:

- May be less than 50 feet

Measures May Be Designed Differently



- Mining Program will review innovative practices such as stone baffles
- Mines often build berms

Bonding

- Reclamation bond is calculated for each permitted mine site
- Bond is returned when the site is “released”
- Final grading and vegetation must be established prior to release

Stormwater Permits

Mines

- NCG02 (renewal 2014)
- Must send Notice of Intent and Fee (additional \$100 fee must be paid yearly)
- Does NOT require surface dewatering for 1 acre or more of drainage

Construction

- NCG01
- Issued automatically with E&SC plan approval
- Requires surface dewatering for 1 acre or more of drainage

E&SC at Mine Sites

- Permanent vs. Temporary
- Buffers cannot be used as measure
- Minimum 50 ft undisturbed stream/wetland buffer
- Measure Designs (porous baffles)
- Bonding Requirements
- Stormwater Permits



It's the same, but different



Questions?



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