



US Army Corps of Engineers



Nationwide Permit Number 49

Coal remining activities

Appalachian Stream Mitigation
Workshop
Lexington, KY
April 14, 2011





Nationwide Permit Number 49 history

- First issued in 2007 after Public Notice and opportunity for public comment
- Prior to 2007, many re-mining activities could be/were verified under NWP 21
- An adjustment period occurred while the regulated public and the agencies learned how to properly apply this NWP (i.e. was not used as much as it could have been initially)
- Currently proposed to be re-issued, with some modifications
 - Federal Register Notice February 16, 2011 (76 FR 9174)
 - 60 day comment period ends April 18, 2011





Areas previously mined may include:

- Reclaimed mine sites
- Abandoned mine lands
- Lands under bond forfeiture contracts





Typical site characteristics

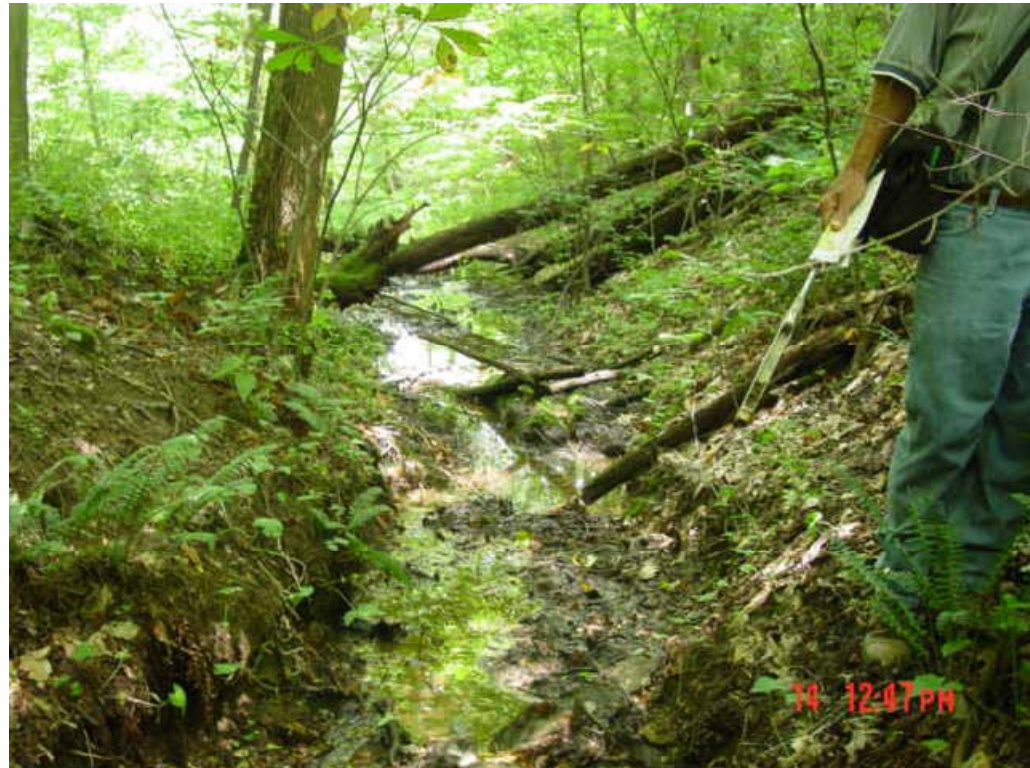
- Abandoned high walls
- Elevated iron, manganese, TDS
- Disconnected drainageways
- Spoil piles





Evaluating site conditions

- Adverse effects may be attenuated over time
- Important to consider baseline conditions (physical, chemical & biological)
- Determine whether re-mining activity would result in a net increase in aquatic resource functions
- **DOCUMENTATION!**





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- Authorization of projects associated with the re-mining and reclamation of lands that were previously mined for coal
- Overall mining plan must result in net increase in aquatic resource functions
- New mining may occur on adjacent areas, provided this new area does not exceed 40% of the re-mined area + unmined lands necessary to reclaim the previously mined lands.





Process requirements

- A PCN is required and this document must describe how the OVERALL MINING PLAN will result in a net increase in aquatic resource functions
- Permittee must receive written notification from the Corps prior to commencing activities in waters
- Activity must be authorized by OSM or states with approved programs under Title IV or V of SMCRA





40% Rule Example

- 600 acres – affected by previously unreclaimed mining activities
- 200 acres – need to be affected to adequately reclaim the first 600 acres – this determination is made by the SMCRA agency, but will be provided to the Corps for review and consideration when determining whether the activity would result in no more than minimal adverse effects
- 40 percent of 800 = 320 acres; Therefore up to 320 acres of “new” area MAY be considered under the NWP 49
- Aquatic resources to be impacted in the entire 1,120 area must be considered and the OVERALL mine plan must result in a net increase in aquatic resource functions





NWP 49 Case Study - Ohio

- 455 acres of the 531 acre overall mine area was surface mined in the 1960s and left un-reclaimed
- Pre-SMCRA unreclaimed features include pits, highwalls and spoil piles
- Estimated 437.4 tons of soil is lost through erosion on site each year
- Natural drainageways have been altered
- Reclamation would result in impacts to 0.98 acres of jurisdictional wetlands and 2,352 linear feet of jurisdictional streams





Demonstration and Documentation of Aquatic Benefits

- Reclamation would occur pursuant to standards set by ODNR-DMRM under SMCRA
- Return project area to grazing land use; 4.5 miles of exposed highwalls would be backfilled and graded; 193 acres of mining pits and spoil piles would be eliminated
- Mitigation includes reconstruction of 2,571 linear feet streams and 1.47 acres of reconstructed wetlands
- Demonstration of aquatic benefits - Total post mining soil loss would be reduced to an estimated 115.66 tons. Reduced sedimentation would be measured at specified monitoring stations
- Stream mitigation combined with reclamation pursuant to SMCRA would provide an ecological lift to receiving tributaries through the reduction of sediment loads





Cautions

- Need to ensure that baseline conditions of aquatic resources are accurately documented
- Must determine reclamation and mitigation activities conducted in association with the OVERALL MINING PLAN would result in a net increase to aquatic resource functions
- Mitigation may not occur outside of the overall mine plan (re-mine area + additional area necessary to carry out reclamation + no more than 40% new mining) to demonstrate net increase to aquatic functions
- Explain proper use of this permit to applicants – process requests submitted under an IP or other NWP as a NWP 49 if appropriate!

