



**Tennessee Department of Environment and Conservation
Division of Water Pollution Control
Mining Section
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October 12, 2011

NOTICE OF DETERMINATION

**Kopper Glo Mining, LLC
1107 Rock Creek Ridge Road
Clairfield, Tennessee 37715**

**Log Mountain Mine
Log Mountain, Rich Gap Road
Marion, Tennessee
NPDES Permit TN0069361 (New)**

Dear Concerned Citizen:

A public hearing was held on September 19, 2011, at the Tennessee Department of Environment and Conservation (TDEC), Knoxville Environmental Field Office (EFO), Knoxville, Tennessee to consider comments on an NPDES permit application for a proposed new contour surface and augur coal mining operation. The site is located on Log Mountain near the community of Marion in Claiborne County and will include 373 acres.

The permit will cover discharge of treated wastewater and stormwater to wet weather conveyances to Tackett Creek, Ben's Branch, White Oak Branch, Meadow Branch, and their tributaries. Tackett Creek and the affected tributary streams are in the Clear Fork of the Cumberland River watershed. These streams are not listed as impaired and are not part of the Clear Fork Total Maximum Daily Load (TMDL).

Tackett Creek is not designated as an Exceptional Tennessee Water (ETW) in the latest listing of high quality Tennessee waters. The stream meets the specifications for "available conditions" as described in *TDEC Rule 1200-4-3-.06(3)*.


One person attended the hearing but did not offer comments for the hearing record. We received one written comment (e-mail) from a representative of the United Mountain Defense (UMD) organization. The comment period extended until September 30, 2011.

The UMD organization was concerned about impacts to downstream waters from increased amounts of dissolved heavy metals and sediment that will be discharged by the coal mine. UMD requests that TDEC not grant this permit based on the fact that it will have a negative net impact on short term and possibly long term water quality.

Based on the results of our review, we have determined that the NPDES permit can be issued for this project. We believe the NPDES permit and supporting plans and requirements will be protective of water quality. These protective features and measures are described below:

- 1) The NPDES permit establishes effluent limitations for Total Suspended Solids, Iron, Manganese, and pH. These are EPA promulgated discharge standards for active coal mining operations established in *40 CFR 434.35 Subpart C*. In addition, discharges must meet the State's limitation for Settleable Solids.
- 2) Mine wastewater and stormwater runoff will be treated in sediment control structures. These basins will be designed for the volume of runoff expected from a 10-year/24-hour storm event.
- 3) The applicant conducted the required alternatives analysis for treatment and discharge options for natural resource extractions as required by Tennessee's *Antidegradation Statement, Rule 12-4-3-.06 (3)(a)*.
- 4) Biological assessment reports on Tackett Creek are included in the application materials. Division personnel also visited the project area and conducted biological sampling and water quality assessments.
- 5) The permittee must comply with the requirements of EPA Form 2C, Item V. C, regarding sampling and analysis for additional pollutants. The analysis includes heavy metals and is to be performed for each outfall within six months of the commencement of a discharge to determine the need or changes in effluent limitations to protect water quality.
- 6) Permittees of coal mining facilities must comply with EPA requirements regarding Reasonable Potential Analysis (RPA) to determine the presence of pollutant or pollutant parameters listed in EPA application forms. Kopper Glo Mining, LLC submitted water analysis from existing NPDES treatment structures at its Tackett Creek Surface Mine 2 which mined the same coal seam, Rich Mountain (Blue Gem), as the proposed Log Mountain Mine. This data provides representative information and serves as a surrogate for Reasonable Potential Analysis (RPA).
- 7) The results of analytical testing did not indicate a reasonable potential to exceed the in-stream water quality standards. Test results were submitted for iron, manganese, chromium, copper, nickel, thallium, zinc, magnesium, total suspended solids, total alkalinity, total acidity, total hardness, and pH.
- 8) The NPDES permit addresses effluent compliance of the narrative water quality standards by requiring the monitoring of sulfate, specific conductance, and the flow rate and flow duration of the discharge activity.
- 9) The area has been extensively disturbed by pre-law mining and mining after implementation of the *Surface Mining Control and Reclamation Act (SMCRA)*. The permit utilizes EPA's *July 21, 2011, Final Guidance for Improving Review of Appalachian Surface Coal Mining Operations under the Clean Water Act (CWA) and National Environmental Policy Act, and the Environmental Justice Executive Order*.

- 10) The company is implementing the following measures for the Log Mountain Mine: 1) proposed to skip all streams and utilize minor road crossings; 2) pre-law mines will be reclaimed and natural drainage patterns re-established as post mining wet weather conveyances within the permit area; 3) submit water quality data from adjacent mining operations for reasonable potential analysis, and 4) submitted an ARAP application for alteration of delineated jurisdictional wetlands that will be mitigated in post-mining at a ratio of 4 to 1.
- 11) The NPDES permit requires the permittee to develop and submit a *Water Quality Standards Protection Plan (WQSPP)* to the Division and OSM for their review and approval within 30 days of the NPDES permit's effective date. The purpose of the *WQSPP* will be to maintain compliance with narrative and numeric Water Quality Standards of the receiving streams.
- 12) Public participation requirements for the NPDES permit application have been met. These requirements included: 1) public notice of the proposed activity, 2) scheduling and holding a public hearing, 3) publication of the hearing notice in a newspaper of general circulation in the area of the proposed discharge activity, and 4) posting of a sign by the applicant at the facility's entrance notifying the public of the proposed activity.
- 13) We notified state and federal agencies of the proposed activity including U.S. Fish and Wildlife Service (USFWS), the Tennessee Wildlife Resources Agency (TWRA), Tennessee Historical Commission, and the Tennessee Division of Natural Resources. Federal oversight is provided by EPA.
- 14) The permittee is required to discharge treated wastewater and stormwater in a manner such that pollution will not occur. Permit compliance will be monitored and enforced by the Division.
- 15) Citizens have the right of third party appeal of permit decisions in accordance with the requirements of *The Tennessee Water Quality Control Act of 1977, TCA 69-3-105 (i)*.


Paul E. Davis, Director
Division of Water Pollution Control

10/12/2011
Date