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FINAL ENVIRONMENTAL ASSESSMENT ADOPTION AND FINDING OF NO SIGNIFICANT IMPACT

NATIONAL COAL CORPORATION, DEEP MINE NO. 14, OSM PERMIT NO TN-019, TVA TRACT NO. XEKCR-43L – PROPOSED APPROVAL OF A MINING PLAN FOR TVA-OWNED COAL, KOPPERS COAL RESERVES, CAMPBELL COUNTY, TN.

Background, Purpose and Need

The proposed Deep Mine No. 14 is located approximately 5.5 miles northeast of the Smokey Junction community in Campbell County, Tennessee, on the TVA-owned Koppers Coal Reserve. The mine site is in the Office of Surface Mining Reclamation and Enforcement (OSM) Cumulative Impact Area (CIA) 8, in the New River watershed at approximately the 2400 ft. elevation and is drained locally by North Fork, a tributary of Montgomery Fork. The mine portal and the coal lie within the Royal Blue Wildlife Management Area (WMA).

Under the proposed operations plan, conventional underground mine techniques would be used to extract approximately 2,000,000 tons of Walnut Mountain coal over a period of 8 years. The proposed mine permit area is 22 acres. The total affected acreage, including underground mine workings, is 788 acres. The proposed permit area was previously surface mined in the 1960s and 1970s and has exposed highwalls.

The Office of Surface Mining-Knoxville Field Office (OSM) provided a 30-day period for submittal of comments on the proposed mining application. OSM received no comments from the public at large, nor any requests for informal conferences. TVA and Tennessee State Parks submitted comments on the proposed mining activities. Informal consultation was undertaken with U.S. Fish and Wildlife Service (FWS). In a letter written September 8, 2005 (attached), FWS concluded that the mining operation, as proposed, would have no effect on any threatened or endangered species. No comments were received from Tennessee Department of Environment and Conservation (TDEC), Division of Natural Heritage of the Tennessee Wildlife Resources Agency (TWRA).

After considering and resolving all comments, OSM subsequently completed an Environmental Assessment (EA) and FONSI on March 17, 2006. A Cumulative Hydrologic Impact Assessment (CHIA) was completed on November 15, 2005. OSM issued a 5-year permit to National Coal Corporation (NCC) for Mine No. 14, effective March 17, 2006, provided that all existing Cessation Orders and Notices of Violation (NOVs) are abated by June 5, 2006. Of those NOVs, six are for mines in the state of Tennessee and two are in North Carolina. TDEC, Division of Water Pollution Control (WPC) issued National Pollution Discharge Elimination System (NPDES) permit No. TN0079502 on March 31, 2005, and General Aquatic Resources Alteration (ARAP) No. P2005-07 permit on October 11, 2005. The Decision Document for approving this mine operation is attached.

The mineral rights in the area proposed for mining under permit number TN-019 have been leased by TVA to National Coal for underground mining on all seams of coal above and including the Walnut Mountain and Red Ash seam (TVA Lease XEKCR-343L). National Coal's Deep Mines No. 10 and 11 are also on this lease. TVA began work on an Environmental Impact Statement (EIS) for the development of plan for managing the entire Koppers Coal Reserve in June 2003. Underground mining on this existing lease has been grandfathered-in under all alternatives under consideration in this EIS.

Under the terms of TVA's coal lease, the company cannot initiate or conduct any mining activity under a proposed general mining plan prior to receiving TVA's written approval. Such approval cannot be given until satisfactory completion of an environmental review. This review is intended to satisfy that requirement. TVA is incorporating by reference Mine Permit Application TN-019 and the March 17, 2006 Decision Document for this permitting action into this environmental review.

Alternatives

OSM considered four alternatives:

- Alternative 1 – Permit Application Approval as submitted
- Alternative 2 – Permit Application Approval with Modification
- Alternative 3 – Permit Application Disapproval
- Alternative 4 – No Action

Under **Alternative 1 or 2,** OSM would issue a permit to U.S. Coal for underground coal mining of the Walnut Mountain coal seam. This coal seam has been extensively mined in the adjacent area without producing acid mine drainage (AMD). The mine is expected to have an average annual production of approximately 250,000 tons over a period of 8 years. The company would use bulldozers, front-end loaders, and trucks for mining and reclamation operations within the proposed 22-acre permit area, for a total of 18 acres of disturbance. An existing haul road under OSM Permit number TN-016 will be used to truck coal to the Smokey Junction coal preparation facility.

The entire permit area has been previously disturbed. Because both the underground mine face-up and load-out areas are located on an unreclaimed 8-acre abandoned mine bench on which highwalls were left exposed, very little blasting will be required. Since no drainage control has been installed, considerable off-site erosion and sedimentation has occurred. There is little or no vegetation on many of the spoil areas and the pit floor.

Land clearing operations on the 3-acre mine face-up area would eliminate existing wildlife habitat and existing soils present on the old bench. The disturbed areas within the proposed permit area, with the exception of the haul road and one of the sediment basins (both of which will be retained), would be reclaimed using all reasonably available spoil. Existing spoil will also be used to reclaim exposed highwalls to approximate topographic conditions that existed prior to the original pre-law mining on the site. Post-mine vegetation will include trees, shrubs, and grasses. The approved postmining land use would be undeveloped with a secondary use of fish and wildlife habitat.

Coal fines and bedded coal associated with the coal stockpile area would be removed from the site for disposal at National Coal's permitted preparation plant and refuse area, in accordance with the plans approved for the refuse area. While the overburden within the mine permit area is not acid producing, the coal seam is. Instead of developing a toxic material handling plan, any toxic material associated with the coal will be hauled to a permitted refuse disposal facility.

Under **Alternatives 3 or 4**, no permit would be issued. The no action alternative (Alternative 4) was dismissed because the Federal Program for Tennessee requires that OSM approve or disapprove a permit application for surface coal mining reclamation operations.

Alternative 2, permit approval with modification, is preferred.

Impacts Assessed

Under Alternatives 1 and 2, there would be temporary changes to topography; land use; wildlife habitat; air quality; and esthetics. The duration of temporary changes would be from 8 - 13 years (final bond release) and the intensity would diminish from initially adverse to minor, or beneficial. In addition, some permanent or long term changes would occur including additional alteration of the geologic strata, increased infiltration rates through the backfilled material and postmining vegetative cover. TVA agrees with OSM's assessment that proper implementation of the proposed operation and reclamation plan, including the hydrologic reclamation plan (HRP), would prevent or minimize any long-term adverse effects that may occur from the permanent changes.

Terrestrial wildlife within and around the mine site primarily consists of upland forest species. No Indiana bats were found, but suitable habitat for roosting is present. A relatively abundant population of neotropical songbirds is present in Royal Blue WMA. Elk have been reintroduced in the vicinity of the mine site. No jurisdictional wetlands are present, but there are about 0.4 acres of riparian areas. Wildlife habitat would be temporarily eliminated within the mine face-up portion of the proposed permit area (approximately 3 acres), resulting in displacement of the more mobile species, and some direct mortality of slow-moving terrestrial species, and most vegetation. As stated above, after mining is complete, the original, pre-mining site topography will be restored.

Once the site is recontoured, the vegetation would be replaced by a different combination of grasses, legumes, shrubs, and trees under the operation and reclamation plan. Due to the small amount of acres to be impacted, and the large amount of similar habitat that is available adjacent to the project area, impact to terrestrial wildlife and vegetation in the region would be temporary and impacts would be insignificant.

No fishery resources are present onsite, but conditions present 0.5 and 1 mile below the proposed mine site could sustain a seasonal, non-game headwater fishery resource. Affects of site reclamation on this resource would likely be beneficial (see discussion of water quality, below).

The Cumberland Trail State Park crosses one section of the haul road and is only 800 feet from the mine face-up areas. In cooperation with state park personnel, measures have been developed to avoid adverse impact to the park.

Since the 3-acre mine face-up area was previously mined and an existing haul road would be used, no affects on cultural resources are expected. In a letter dated

January 18, 2005, the Deputy State Historic Preservation Officer (SHPO) concurred that the proposed mining operation would have no effect National Register of Historic Places (NRHP) listed or eligible properties (attached).

Minor impacts are expected to air quality from mining and reclamations operations and from coal trucks. These will be controlled with a fugitive dust plan. TDEC determined that no air quality monitoring is required or necessary.

Because there are no residents in the vicinity of the mine site–which is 2.5 miles from the nearest pubic road–no noise or visual impacts to the public are predicted, except those related to coal haulage activities. Approximately 3-5 residential structures are located long the unpaved county road between the on-site permitted haul road and the off-site coal processing facility. The noise levels associated with the movement of coal trucks will be minimized by restricting truck deliveries to daylight hours, Monday through Saturday, over the life of the mine. Visual, dust and noise impacts might marginally affect the Cumberland Trail users at times when blasting is being conducted. These impacts would be minimized through implementation of measures identified under "Mitigation."

OSM conducted a cumulative hydrologic impact assessment (CHIA) to determine the expected quality water discharges from the disturbed areas into the receiving streams. The CHIA concluded that the receiving streams would not be significantly adversely affected by the proposed mining operations and no significant alteration in stream flow is expected. Overall, the proposed remining and subsequent reclamation of the existing mine bench is expected to improve the quality of the water leaving the mine site. The anticipated increases in pollutant concentrations are well within the U.S. Environmental Protection Agency (EPA) water criteria for identified surface water use classifications. No developed aquifers or groundwater users would be adversely affected.

Minor to no impacts are expected on resources present at residential or public use areas. If approved, the mining activity would create some jobs in the local area, add revenue to the county tax base and spur the local economy.

In summary, some temporary and permanent impacts to resources are anticipated as a result of the proposed issuance of this permit. These impacts would be mitigated by the implementation of the proposed mining and reclamation plan--which includes an HRP, a revegetation plan, a fugitive dust control plan and a sediment control plan--and minimized or abated during and following site reclamation.

No cumulative affects on surrounding communities are expected.

The affects of implementing **Alternative 3** are briefly mentioned in OSM's EA. If the proposed mine operation is disapproved and a permit is not issued, the adverse affects of mining would not occur, but there would be a loss of potential jobs and revenue to the local economy and county tax base.

Mitigation

The following mitigation measures will be used to avoid or minimize any adverse affects from the proposed mine operation:

1. Spoil material will be re-graded during reclamation of the site to reestablish pre-mining topography.

2. Appropriate sediment control measures have been incorporated into the proposed mining plans to minimize impacts to downstream aquatic habitats from the mine development area and haul road. Water quality will be monitored.

3. Reclamation plans call for establishment of grass-legume herbaceous ground cover, shrubs and tree species. Implementation of the proposed topsoil / topsoil substitute handling and revegetation plans will ensure that the replaced soil growth medium will support the permanent, diverse, and effective vegetative cover proposed for the reclaimed mine site.

4. The FWS request for hardwood trees to be planted at a rate of 200 or more per acre on the steeper part of the permit area to mitigate for potential affects to the Indiana bat has been incorporated into the revegetation plan. FWS also specified that removal of potential roost trees be limited the period between November 15 and March 31.

5. At TWRA's request, one sediment basin will be retained as a permanent structure to provide habitat diversity and enhance the establishment of wildlife.

6. Measures to protect the Cumberland Trail include:

    a. Posting signs on the trail to inform hikers of mining activity.

    b. Blocking the trail in both directions 30 minutes prior to blasting.

    c. Reclamation of pre-existing highwalls.

    d. Placement of tree and brush windrows in such a way to avoid potential fire hazard to the trail.

    e. Control of fugitive dust in the mine permit area.

7. A fugitive dust control plan will be implemented.

8. Implementation of the mine operation and reclamation plan, including the HRP will help prevent or minimize the long-term adverse effects from permanent or long-term changes.

9. All material associated with the coal, such as fines and bedded coal associated with the coal stockpile areas will be removed from the site and disposed of at National Coal's permitted preparation plant and refuse area.

TVA Review

TVA staff reviewed National Coal Corporation's Application for Surface Coal Mining and Reclamation Permit, OSM No. TN-019, January 2005 and submitted comments to OSM-KFO in a letter dated March 23, 2005. TVA staff also reviewed permit application revisions submitted by National Coal Corporation on May 20, 2005, July 22, 2005, and August 19, 2005, in response to OSMs deficiency letters dated March 21, 2005, July 12, 2005, and August 11, 2005. These letters are in the mine permit application which is available to the public in the Office of Surface Mining Knoxville Field Office, 710 Locust Street, John Duncan Federal Building, Knoxville, Tennessee 37902.

TVA participated as a cooperating agency in the preparation of an EA for issuance of OSM Permit No. TN-019 for National Coal Deep Mine No. 14. TVA staff reviewed and commented on the Draft EA, submitting comments to OSM on November 4, 2005. TVA also reviewed the attached OSM Decision Document.

Conclusion and Finding

Based on the three-tiered review process described above, TVA has independently determined that the OSMs March 17, 2006, EA for National Coal Corporation Deep Mine No. 14, OSM Permit No. TN-019 adequately addresses the impacts of this mining proposal and is herewith adopting the EA. The decision documents for the environmental review of Deep Mine 14 are attached and incorporated by reference. Contingent on the implementation of measures incorporated in the SMCRA permit application to prevent, minimize or mitigate impacts to protected species, water quality, hydrologic regime, air quality, and noise, TVA concludes that its approval, under the current lease, of National Coal's proposed mining plan would not have a significant impact on the quality of the environment. Accordingly, an environmental impact statement is not required. TVA's adoption of the OSM EA on Deep Mine No. 14 (TN-019) completes the environmental review required by TVA's coal lease.

Attachments

Decision Document for U.S. Coal, Inc, Deep Mine No. 14, Campbell County, Tennessee, OSM Application No. TN-019, including the SMCRA Permit (March 17, 2006), the Findings, a Cumulative Hydrologic Impact Assessments (November 15, 2005), and NEPA Compliance documents (March 17, 2006).

Letter dated September 8, 2005, from Lee A. Barclay (FWS) to Doug Siddell (OSM) concurring with proposed protective measures for Indiana bats and stating that the requirements of section 7 of the Endangered Species Act of 1973 have been fulfilled in regard to TN-019.

Letter dated January 18, 2005, from Herbert L. Harper (TN SHPO) to Tim Slone (IRTEC) stating that no NRHP listed or eligible properties would be affected by the proposed project.

Jon M Loney

April 17, 2006

Jon M. Loney, Manager
NEPA Policy
Environmental Stewardship and Policy

Date