UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

30 JAN 2009

Ginger Mullins, Chief
Regulatory Branch
Huntington District
U.S. Army Corps of Engineers
502 Eighth Street
Huntington, West Virginia 25701-2070

Re: Public Notice No. 2008-491; Consol of Kentucky Buffalo Mountain Surface Mine

Dear Ms. Mullins:

The U.S. Environmental Protection Agency (EPA) has completed its review of Consol of Kentucky, Inc's proposal to discharge dredged and/or fill material into approximately 52,014 linear feet of waters of the United States in conjunction with the construction, operation and reclamation of Buffalo Mountain Surface Mine. The proposal includes the direct permanent impacts to 12,252 linear feet of perennial stream channels, 23,354 linear feet of intermittent stream channels, and 7,508 linear feet of ephemeral stream channels. Temporary structures, including drainage control structures, road crossings, and erosion protection zones, would result in 7,330 linear feet of perennial, 1530 linear feet of intermittent, and 40 linear feet of ephemeral stream channel impacts. Project components include 13 valley fills, 4 erosion protection zone structures, several mine-through areas, 17 temporary drainage control structure, and 6 temporary stream crossings. The project purpose is to discharge dredged/fill material to construct attendant and associated features to facilitate efficient extraction of 16,784,000 tons of coal reserves in the SMCRA permitted area and line and rough grade for a portion of the King Coal Highway. A compensatory mitigation statement was included in the Public Notice and includes an approach of headwater re-establishment, establishment, and preservation, restoration and enhancement of degraded channels downstream from the proposed mine, restoration of temporarily impacted channels, and treatment of water quality downstream from the proposed mine. EPA has significant concerns regarding the cumulative impacts of this project on the watershed, impairment of downstream water quality and the significant amount of impacts to perennial stream channels. EPA does not believe that the proposed mitigation will adequately offset the persistent and permanent impacts to the aquatic ecosystem communities and functions.

The Clean Water Act Section 404(b)(1) Guidelines state that the "fundamental precept of these Guidelines is that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of

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other activities affecting the ecosystems of concern." Based on information gathered for our review of the Public Notice EPA believes that this project, as proposed, has not made such a demonstration.

This mine is proposed primarily in the headwaters of Pigeon Creek, an area that is relatively intact with forested areas typically undisturbed and the streams themselves likely attaining water quality standards. However, Pigeon Creek itself is listed as an impaired stream on the WVDEP's 303(d) list for mining-related pollutants. Pigeon Creek is a direct tributary to the Tug Fork which has an approved TMDL (2002), and the report indicates that the tributary delivers the highest load of Aluminum, Iron, and Manganese than any other tributary to the Tug Fork in West Virginia. The ability for Pigeon Creek to assimilate additional pollutants that will occur from this activity needs to carefully and strongly considered, especially in light of other extensive mining operations in the sub-watershed. In addition, considering the goal of the Clean Water Act to improve and maintain the biological, chemical and physical integrity of the nation's waters, consideration must be made on the ability to achieve the goal of the Tug Fork TMDL and of the CWA itself when these additional impacts are occurring in the watershed.

Cumulative impacts, as indicated above are required to be considered in the 404(b)(1) Guidelines analysis. The Guidelines require an analysis to determine if significant degradation of the aquatic ecosystem will occur, with special emphasis on the persistence and permanence of effects, both individually and cumulatively. The information at this time is insufficient to make such a determination. The question is whether this activity in combination with other activities, including past, present, and reasonably foreseeable mine operations, and possible development of the area as a result of the proposed King Coal Highway, rises to a level of significance that needs to be comprehensively evaluated through both the CWA provisions and under the Corps' NEPA responsibilities.

Evidence of the extent of persistent and permanent degradation to aquatic communities exists. EPA Region 3's Freshwater Biology Team has extensively investigated the downstream effects of mountaintop mining and the associated valley fills. The results indicate that these types of activities proposed by the applicant are strongly related to downstream biological impairment, as indicated by raw taxonomic data, individual metrics that represent important components of the macroinvertebrate assemblage, or when multi-metric indices are considered (Pond et al 2008). Their results also confirm earlier studies that mountaintop mining impacts to aquatic life are strongly correlated with ionic strength in the Central Appalachians. In U.S. EPA's dataset, all mined sites with the specific conductance greater than 500 μS/cm were rated as impaired with a genus-level multi-metric index (GLIMPSS). Undisturbed streams in the Central Appalachians are naturally very dilute, with background conductivities generally less than 75 μS/cm. Downstream of mine sites, specific conductance and component ions can be elevated twenty to thirty times over the background levels observed at un-mined sites (Bryant et al. 2002). This increase in conductivity impairs aquatic life use and is persistent over time. This impact can not be easily mitigated or removed from stream channels.

The results of our Freshwater Biology Team's study indicate that the severity of the biological impairment rises to the level of a violation of water quality standards (WQS) when States or USEPA use biological data to interpret narrative standards. For example, in West Virginia, the narrative WQS reads, ". . . no significant adverse impact to the chemical, physical, hydrologic, or biological components of aquatic ecosystems shall be allowed". WVDEP uses

biological data to interpret their narrative WQS and then list mining-impaired streams on their 303(d) lists. The CWA Section 404(b)(1) Guidelines at 230.10(b) state that "no discharge of dredged or fill material shall be permitted if it (1) Causes or contributes, after consideration of disposal site dilution and dispersion, to violation of any applicable State water quality standard..." Evidence to date shows that valleyfills permitted for this mining-operation may result in downstream impacts that may lead to impairment of the aquatic life use and would therefore result in a violation of West Virginia water quality standards. It is the Corps' responsibility under WVDEP's 401 Certification (standard condition #10) that their 404 permit "...comply with water quality standards contained in the West Virginia Code of Regulations, Requirements Governing Water Quality Standards, Title 47, Series 2."

EPA is also concerned that the project as proposed does not represent the least environmentally damaging practicable alternative. The proposed project is non-water dependent, meaning that it does not require or need to be sited in or near water to meet its basic project purpose. The CWA Section 404(b)(1) Guidelines clearly state that alternatives are presumed to be available for non-water dependent activities that do not involve the use of the aquatic ecosystem, including jurisdictional wetlands [40 CFR 230.10(a)(3)]. Only the least environmentally damaging practicable alternative (LEDPA) can be permitted and in order to identify the LEDPA the applicant's alternatives analysis must examine a full range of alternatives which would avoid and minimize impacts to the maximum extent practicable. The proposed post mining land use for five miles of King Coal Highway requires that the applicant leave portions of the mine site to West Virginia Department of Highways (WVDOH) specifications for line and rough grade for the highway, and areas for utility right-of-way. This leads our agency to question if all methods of avoidance and minimization are being incorporated due to the inability to return the areas to approximate original contour (AOC), or ACO+, or to further back stack fill material onto the valley fills. In regards to the construction of the highway, if WVDOH were undertaking the venture themselves would the impacts be minimized through such methods as bridging the perennial channels, or the selection of an alignment with less aquatic impacts? Consideration of alternatives to minimize the impacts to downstream water quality should be evaluated including intercepting and treating drainage prior to its entering the tributary system and placing sediment ponds outside waters of the U.S. Under the Clean Water Act Section 402, National Pollutant Discharge Elimination System, surface waters are generally not to be used as treatment systems as it has an adverse effect on the water quality of those surface waters.

The mitigation statement focuses on physical parameters. The conceptual plan is likely inadequate to fully compensate for lost functions of the aquatic ecosystem and will not be able to return aquatic life uses downstream. To date it has not been demonstrated that the re-establishment or establishment of headwater streams at these sites are adequately constructed or develop over time to provide the functions of natural headwater streams. EPA believes these impacts are a loss of the aquatic ecosystem and can not be adequately restored or replaced.

Thank you for opportunity to provide comments for this proposed project. In summary, EPA believes that this proposal will contribute to a violation of the State's water quality standards downstream and that the direct and cumulative impacts from this and future mines and possible development associated with the King Coal Highway will be persistent and permanent and can not be sufficiently or effectively compensated through the proposed mitigation, therefore EPA must recommend denial of the permit as proposed. A thorough analysis of the impacts and their effects on the watershed are warranted. Past projects of this magnitude and uncertainty of

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effects have given rise to the development of an Environmental Impact Statement as required by the National Environmental Policy Act and EPA believes that this project also requires such an investigation and evaluation.

Should you have any questions please feel free to contact Ms. Jessica Martinsen at 215-814-5144 or by email at martinsen.jessica@epa.gov.

Sincerely,

Jeffrey D. Lapp, Associate Director
Office of Environmental Programs

Cc: Region 3 Freshwater Biology Team, Wheeling, WV

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