

US EPA ARCHIVE DOCUMENT



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

Colonel Andrew W. Backus
U.S. Army Corps of Engineers
Norfolk District
803 Front Street
Norfolk, Virginia 23510-1096

DEC 07 2010

Dear Colonel Backus:

The U.S. Environmental Protection Agency (EPA) provided comments on November 12, 2010 in response to the public notice for Paramount Coal Company Virginia's proposed Doe Branch Surface Mine located near the community of Haysi, Dickenson County, Virginia.

The project's proposal would impact 16,330 linear feet of stream and 2.42 acres of wetlands within the Barts Lick Creek and Russell Prater Creek watersheds which drain to the Russell Fork of the Upper Levisa Fork River. We indicated in our previous letter that the project as currently proposed may not comply with the Section 404(b)(1) Guidelines, that the project may adversely affect water quality and result in significant degradation to the aquatic ecosystem, and that efforts be considered to address such impacts. These comments are incorporated herein by reference. EPA has not received additional information addressing the concerns described in the November 12, 2010 letter. EPA continues to be concerned that this project may not satisfy the Clean Water Act Section 404(b)(1) Guidelines, 40 C.F.R. Part 230, that form the substantive environmental criteria upon which permit decisions are based.

The proposed project would increase total historical and current mining impacts to 22 percent of the Barts Lick watershed. The proposal would raise the impacts within the Russell Prater watershed to 31 percent. Russell Prater Creek has an approved Total Maximum Daily Load (TMDL) from its headwaters to the confluence with Russell Fork for both Total Suspended Solids (TSS) and Total Dissolved Solids (TDS). The tributaries that are proposed to be impacted are vital to maintaining the current conditions of downstream sections of the stream by providing fresh water dilution to degraded downstream reaches. As stated in our previous letter, the best scientific information available to EPA, including published, peer-reviewed studies, indicate that surface coal mining activities like those proposed by the applicant are strongly related to downstream biological impairment. These studies show that surface mining impacts on aquatic life are strongly correlated with ionic strength in Central Appalachian streams. Increased conductivity has the potential to adversely impact aquatic life use, is persistent over time, and has not been demonstrated to be easily mitigated after-the-fact or effectively treated once mining begins.



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Based on the information available to EPA, and in the absence of additional site-specific information in response to EPA's November 12, 2010 letter, EPA believes that discharges from the project, as proposed, will have a substantial and unacceptable impact on aquatic resources of national importance. See Part IV of the 1992 Clean Water Act Section 404(q) Memorandum of Agreement between EPA and the U.S. Army Corps of Engineers (Corps).

To address our concerns, EPA offers the following recommendations to the Corps and the applicant:

- Identify any and all appropriate and practicable alternatives to avoid and minimize impacts to waters of the United States beyond the two-level approach provided in the Joint Permit Application. In particular, such alternatives should focus on mining operations that may produce different overall coal quantities than the applicant's proposal to recover 4.5 million tons of coal. The concept of avoidance and minimization incorporates not only the footprint of the fills but also should include construction techniques or best management practices designed to avoid or minimize adverse water quality impacts to downstream waters.
- Provide a detailed demonstration of the use and effectiveness of such techniques, as identified through the alternatives analysis above, to be protective of significant degradation and downstream water quality impacts.
- Address and incorporate into the mine plan "sequencing" the construction of valley fills. In this context, the term "sequencing" refers to the construction of one valley fill at a time combined with a demonstration that construction has not caused or contributed to significant degradation of the waters of the United States and/or to violations of any applicable water quality standard before the applicant proceeds to the construction of the next valley fill.
- Reevaluate, and where appropriate, correct benthic baseline monitoring data for inconsistencies and flaws in sampling protocol methodologies, calculations, and reporting, as we identified in our November 12, 2010 letter.
- Develop an adaptive remedial action plan which includes a monitoring plan that will adequately assess the effluent and its constituents and include biological sampling. Thresholds should be established along with a trigger for appropriate responses for remediation and trigger implementation of a plan to prevent conductivity levels from rising to levels that may contribute to water quality degradation. EPA expects conductivity impacts of projects with predicted conductivity values below 300 $\mu\text{S}/\text{cm}$ generally are not likely to cause water quality violations or significant degradation of the aquatic ecosystem, whereas discharges with levels of conductivity above 500 $\mu\text{S}/\text{cm}$ generally are likely to be associated with adverse impacts that could cause or contribute to significant degradation and/or excursions from narrative water quality criteria.
- The mitigation plan should be redesigned so that it does not provide mitigation credit for the use of groin ditches for stream creation mitigation.
- The mitigation plan should include an appropriate monitoring plan that includes observable and measureable biological and chemical parameters along with the proposed physical parameters used as benchmarks for success and requires demonstration of success within a defined time period of at least 10 years.



- EPA recommends that the Corps conduct a thorough cumulative effects analysis that includes a detailed presentation of past, present, and reasonably foreseeable activities; fully analyzes the current state of the aquatic ecosystem; and considers the effects on the human environment including impacts to the subwatershed from the filling of streams that currently provide freshwater dilution and potential impacts to private drinking wells and other drinking water supplies.

There are opportunities to address the concerns raised in our November 12, 2010 letter. As currently proposed, EPA finds this project will have a substantial and unacceptable impact on aquatic resources of national importance. This letter follows the procedures outlined in the August 1992 Memorandum of Agreement between the EPA and the Department of the Army, Part IV, paragraph 3(b). In addition, we believe it may be appropriate for the Corps to prepare an Environmental Impact Statement, as it is not clear that the mitigation proposal, as currently drafted, would serve as a basis for supporting a Finding of No Significant Impact.

If you have any questions, please do not hesitate to contact me or have your staff contact Mr. John R. Pomponio, Director of the Environmental Assessment and Innovation Division, at 215-814-2702.

Sincerely,



Shawn M. Garvin
Regional Administrator

