

US EPA ARCHIVE DOCUMENT



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

22 APR 2009

Colonel Dana R. Hurst
District Engineer
U.S. Army Corps of Engineers, Huntington District
502 Eighth Street
Huntington, West Virginia 25701-2070

Re: PN 2003-00238-KAN; Alex Energy Inc., Republic No. 1 Surface Mine

Dear Colonel Hurst:

The U.S. Environmental Protection Agency (EPA) provided comments on April 3, 2009, in response to the Public Notice regarding Alex Energy Inc.'s proposed Republic No. 1 Surface Mine located near Carbon, Kanawha County, West Virginia. The proposal is for the construction of three permanent valley fills, one mine-through area, and three sediment control structures into approximately 10,914 linear feet of intermittent and ephemeral stream channels. EPA indicated in the previous letter that we believed that impacts from this proposal may be further avoided and minimized. As proposed, the project may cause or significantly contribute to the impairment of downstream aquatic life use and violation of the State's water quality standards. EPA is also concerned that forest fragmentation and habitat loss within a globally significant and biologically diverse forest ecosystem may occur and that cumulative adverse impacts in the Cabin Creek watersheds must be addressed. These comments are incorporated herein by reference.

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. EPA is concerned with the direct impacts associated with the footprint of the mine area and the valley fills, the potential for downstream aquatic life use impairment, the potential cumulative impacts to the watershed, and mitigation.

This proposal is within unnamed tributaries to Long Branch and unnamed tributaries to and within Abbot Creek watershed. Abbot Creek drains to Fifteenmile Fork which flows into Cabin Creek. Both Abbot Creek and Fifteenmile Fork are listed on the State's 303(d) list for aluminum, iron, manganese, and pH. Cabin Creek is also listed as impaired and has an approved Total Maximum Daily Load for aluminum, iron, CNA, fecal coliform, manganese, iron and pH. Recent aerial photographs and topographic maps indicate previous mining in the area; however, the headwaters above the proposed fills are currently forested and the tributaries that are proposed to be filled are currently unimpaired headwater stream channels. EPA believes that these headwater streams are vital to the protection, maintenance, and enhancement of the downstream aquatic ecosystem. These unimpaired tributaries provide clean freshwater to the above-noted impaired receiving streams, thus preventing further degradation. As indicated in the previous letter, EPA has studied the effects of surface mining involving valley fills adding to the body of scientific evidence that has identified downstream of large-scale mining operations, such as the proposed project, a pattern of biological impairment. Consistent with the Section 404 (b)(1) Guidelines, EPA believes, in light of these concerns, that additional opportunities to further avoid and minimize impacts to



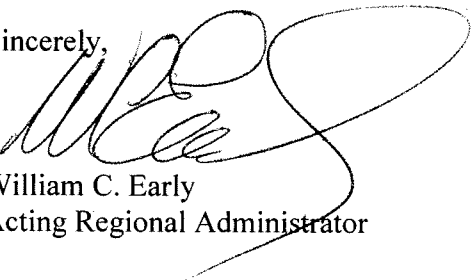
aquatic resources should be examined. EPA believes that the project, as proposed, will result in substantial and unacceptable impacts to aquatic resources covered in Part IV of the 1992 Clean Water Act Section 404(q) Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army.

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

- Identify all appropriate and practicable steps that would further minimize the fills in the headwater stream channels, including the evaluation of additional backstacking or other methods which are appropriate from a mining safety and stability standpoint.
- Develop a reasonable potential analysis to determine if the activity will cause or contribute to excursions from applicable water quality standards, including applicable designated uses, narrative criteria, and antidegradation. The applicant should also identify sampling locations and conduct appropriate in-stream monitoring, effluent characterization and effluent monitoring.
- A thorough cumulative impacts analysis of the watershed should also be developed.
- EPA also wishes to ensure that the mitigation proffered replaces the lost functions and services of the impacted streams. To ensure replacement of the lost functions and services of the impacted streams any mitigation proposal should strive to match the lost flow regime (frequency, duration and seasonality of flow annually), provide the same structural habitat (riffle pool, shading, etc), meet the same water chemistry characteristics (hardness, pH, conductance), and also support the same biologic communities (macroinvertebrates, fish, etc). The appropriate mitigation plan should include performance standards to determine if a compensatory mitigation project meets its objectives.

EPA believes there are opportunities to address the concerns EPA has raised and look forward to working with the Corps and the applicant to explore the recommendations provided by EPA and other opportunities the Corps and applicant wish to introduce and discuss. If you have any questions or concerns please feel free to contact me or Mr. John R. Pomponio of my staff at 215-814-2702.

Sincerely,



William C. Early
Acting Regional Administrator

