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

AUG 23 2010

Colonel Robert D. Peterson
District Engineer
U.S. Army Corps of Engineers
Huntington District
502 Eighth Street
Huntington, West Virginia 25701

Dear Colonel Peterson:

The U.S. Environmental Protection Agency (EPA) provided comments on July 28, 2010 in response to the public notice for Raven Crest Contracting, LCC's Boone #5 Surface Mine located near Racine, Boone County, West Virginia. The project's proposal involves the direct impact to 15,079 linear feet (lf) of Roundbottom Creek and Mill Branch. EPA indicated in a letter to the U.S. Army Corps of Engineers (Corps) dated July 28, 2010 that the project as currently proposed may not comply with the Section 404(b)(1) Guidelines by adversely affecting water quality which would result in significant degradation to the aquatic ecosystem. In addition, EPA asked that efforts be considered to address such impacts. Those comments from the July 28 letter are incorporated herein by reference. EPA has not been provided additional information addressing the concerns described in the July 28, 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 project is located in the Drawdy Creek-Big Coal River Subwatershed (HUC-12) and the Coal River Sub Basin (HUC-8). Specific water quality and biological data for Roundbottom Creek and Mill Branch has not been provided. However, based on information available to EPA, the creek immediately east of the proposed site, Foster Hollow, is in excellent condition and has an exceptional biological community (West Virginia Stream Condition Index score of 98 and Observed/Expected (O/E) macroinvertebrate genus ratio >1.0 indicating equivalent or better than West Virginia Department of Environmental Protection reference sites with regard to the expected native fauna). It appears that Roundbottom Creek and Mill Branch may have similar conditions as Foster Hollow as they are situated in the same area. It is likely that Roundbottom Creek and Mill Branch are vital to maintaining the current conditions of downstream sections of the stream by providing clean, fresh water dilution to degraded downstream sections of the stream. As stated in our previous letter, the best information available to the EPA, including published, peer-reviewed studies indicate the activities proposed by the applicant are strongly correlated to downstream biological impairment.

As stated in EPA's previous letter, on April 1, 2010, EPA released interim final guidance to the regional offices titled: *Guidance on Improving EPA Review of Appalachian Surface Coal Mining Operations under the Clean Water Act, National Environmental Policy Act, and the Environmental Justice Executive Order* (SCM Guidance). The SCM Guidance provides a framework for the regions in reviewing permits for discharges associated with Appalachian surface mining projects. At the same time, EPA released two Office of Research and Development (ORD) reports: *The Effects of Mountaintop Mines and Valley Fills on Aquatic Ecosystems of the Central Appalachian Coalfields* and *A Field-Based Aquatic Life Benchmark for Conductivity in Central Appalachian Streams (Benchmark Conductivity Study).* These documents inform the Agency's review of proposed surface mining projects. Based on the information available to EPA, including the ORD reports, and in the absence of additional site-specific information provided in response to EPA's July 28, 2010 letter, 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 alternatives to avoid and minimize impacts to waters of the U.S.
  - The concept of avoidance and minimization incorporates not only the size of mine through areas but also includes construction techniques and best management practices that will avoid or minimize adverse water quality impacts to downstream waters.

- Provide a detailed demonstration of the use and effectiveness of such techniques to avoid significant degradation and adverse downstream water quality impacts identified through the alternative analysis above.

- Develop an adaptive remedial action plan that includes a robust monitoring plan that will adequately assess the effluent and its constituents and include biological sampling.
  - Thresholds need to be established. If thresholds are exceeded, a response plan would be required to prevent conductivity from rising to levels that may cause or contribute to water quality degradation. EPA expects that the conductivity impacts of projects with predicted conductivity values below 300 µS/cm generally are not likely to cause water quality violations or significant degradation of the aquatic ecosystem. Conversely, discharges with levels of conductivity above 500 µS/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 include observable and measureable biological and chemical parameters along with the proposed physical parameters as benchmarks for success and require demonstration of success within a defined time period.

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

EPA believes there are opportunities to address the concerns it has raised and looks 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,

Shawn M. Garvin
Regional Administrator