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

AUG 11 2010

Mr. Jeffrey Parsons
West Virginia Department of Environmental Protection
Division of Mining & Reclamation
601 57th Street SE
Charleston, WV 25304

Re: WV NPDES No. WV0095311
Patriot Mining Company Inc., Wades Run/Bethel Mines
Reissuance #3, Surface Mines, S-1034-89, S-0117-75, S-0055-80
EPA Receipt Dates – July 12 & 19, 2010

Dear Mr. Parsons:

Pursuant to Section 402 of the Clean Water Act, 40 CFR Section 123.44 and the *Memorandum of Agreement Regarding the Administration and Enforcement of the National Pollutant Discharge Elimination System (NPDES) in West Virginia (1982)* (MOA), the U.S. Environmental Protection Agency (EPA) Region III received the 2 draft permits cited above. For the reasons described below, we consider these submittals incomplete; therefore we are issuing an interim objection consistent with the MOA and 40 C.F.R Section 123.44(d)(2).

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 when they review 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).* The ORD reports have been submitted to the EPA Science Advisory Board (SAB) for review and are also publicly available. In the interim, EPA views the reports as providing information, along with published, peer-reviewed scientific literature, that may inform permit reviews.

Based on the best information available to EPA, 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. 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.

Baseline water quality data provided with this permit included samples demonstrating levels of conductivity and sulfates in the outfall discharge that are consistent with levels potentially associated with biological impairment Supporting water quality analyses exhibited specific conductivity levels of 2210 umhos, and total sulfates of 1350 mg/l. The documentation provided to EPA did not include a reasonable potential analysis to determine whether total dissolved solids, specific conductivity and/or sulfates in the proposed discharges have a potential to cause or contribute to downstream biological impairment and whether limits for total dissolved solids, conductivity, and/or sulfates should be developed and included in the permit pursuant to 40 CFR § 122.44 (d)(1)(i), (ii) and (vi). We consider this information necessary for EPA to determine whether the permit is consistent with the CWA and NPDES regulations as described in 40 CFR§ 123.44(d)(2). We request that WVDEP undertake this analysis and determine appropriate limits to be included in the permit. We consider this to be an incomplete submittal. Accordingly, this letter represents an interim objection to issuance of this permit and our review under the MOA will recommence once we have received this information.

EPA recognizes that in certain fact-specific circumstances, instream conductivity levels greater than 500 µS/cm may not cause adverse impacts to the biological community. To the extent that is believed to be the case here, characterization of the effluent should include an analysis of the ionic matrix and whether the effluent will be dominated by calcium, magnesium, bicarbonate , sulfate and chloride. Where instream background conditions are limestone-dominated, that also should be noted. In addition, analysis should be provided as to whether the native aquatic community is similar to that studied in the *Benchmark Conductivity Study* and in Pond, G.J., M. E. Passmore, F.A. Borsuk, L. Reynolds, and C. J. Rose. 2008, *Downstream effects of mountaintop coal mining: comparing biological conditions using family- and genus-level macroinvertebrate bioassessment tools*, J. N. Am. Benthol. Soc. 27(3):717–737. Any analysis based on differences of the native aquatic community should include a review of taxa (at the genus level) at applicable reference sites within the region. There, we request that instream and effluent monitoring be required to evaluate at a minimum, total dissolved solids (TDS), specific conductivity (SC), calcium, magnesium, bicarbonate, chlorides and sulfates.

We also request that the permit record include baseline and annual West Virginia Stream Condition Index (WVSCI) scoring for the instream monitoring locations and that the monitoring program required by Section D, paragraph 3 include instream biological monitoring using WVSCI, EPA's Rapid Bioassessment protocols, and any other methodologies employed or accepted by WVDEP to assess attainment of biological use for purposes of Section 303(d) during the life of the permit. We recommend that the baseline information in the record and required instream biological monitoring identify taxa to the genus level.

It was noted that the outfalls specified in the permit did not include Technology Based Effluent Limits (TBELs) for Manganese. Baseline sampling indicated a concentration of 7.156 mg/l for Manganese in-stream in Wades Run. The Rationale provided describes the receiving

watershed as impaired for Manganese (TMDL for Scott's Run and Wades run), and there is a reference to "modification 9 granting post mining limits for manganese". EPA contacted WVDEP to request the bond status/supportive documentation for the modification 9 limits established for this permit. Further discussion with WVDEP personnel concluded that in essence the WVDEP 5-mile Rule would apply for this permit, regardless of the TMDL, and therefore limits were not placed in the permit. In this instance the WVDEP's water quality based effluent limits may not be deemed to apply for Manganese, however, technology based effluent limits as specified in 40 CFR 434.32 and 40 CFR 122.44(a) would apply, and should be added to the permit.

As noted, please provide the requested information and changes to the permit and statement of basis, if any. Feel free to contact me at 215-814-5717 or Bette Conway at 215-814-5744.

Sincerely,

Evelyn S. MacKnight

Evelyn S. MacKnight, Chief
NPDES Permits Branch (3WP41)
Water Protection Division

cc: Thomas L. Clarke, WV DEP
Jon M. Capacasa, EPA

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