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January 26, 2011

Finis E. St. John, IV
President pro tempore,
UA System Board of Trustees
c/o St. John & St. John, LLC
P.O. Box 2130
Cullman, Alabama 35056

Via Electronic Mail Only

Re: Shepherd Bend Mine
Walker County, Alabama

Dear Mr. St. John:

Please know that we appreciated your November 2, 2010 letter in which you invited us to provide additional information about the Shepherd Bend Mine for consideration by The Board of Trustees of the University of Alabama System (Board of Trustees). In light of a recent comment letter submitted by the Birmingham Water Works Board (BWWB) to the Alabama Department of Environmental Management (ADEM), we wanted to share some important insights that letter contains about the Shepherd Bend Mine.

While the BWWB's comments address a different mine, the National Pollutant Discharge Elimination System (NPDES) permits developed by ADEM for that mine (Reed No. 5) and Shepherd Bend are very similar. Reed No. 5 would also discharge upstream of the public drinking water intake on the Mulberry Fork of the Black Warrior River. Thus, the analysis the BWWB performs and the information they share in their comments is just as applicable to Shepherd Bend.

According to the BWWB comments, this mine, like Shepherd Bend, has a "high potential for adverse impacts to the Birmingham drinking water supply" and ADEM's draft permit "is not protective of the designated uses of Mulberry Fork." The BWWB point out that the draft permit for the mine (like Shepherd Bend) appears to have been developed from federal effluent guidelines which only address typical coal mining operations, *see* 40 CFR part 434, not the present situation where the mining occurs in such close proximity to the public water supply. A review of these guidelines reveals that protection of the public drinking water supply is neither considered nor addressed, perhaps because (as the BWWB observes) surface mining operations and drinking water withdrawals are such incompatible uses.

As a result, the iron and manganese limits in the permit are not protective of water that is designated public water supply. The permit's generally applicable discharge limits (identical to the Shepherd Bend permit) include daily average total iron concentrations of 3.0 mg/L (with a daily

maximum of 6.0 mg/L); daily average total manganese concentrations of 2.0 mg/L (with a daily maximum of 4.0 mg/L); daily average TSS of 35.0 mg/L (with a daily maximum of 70.0 mg/L); and pH ranging from 6.0 to 9.0. The permit provides that the total manganese limits are *not* applicable if pH is 6.0 or higher and total iron is less than 10 mg/L.

The Safe Drinking Water Act contains secondary maximum contaminant levels (MCLs) for total iron of 0.3 mg/L and total manganese of 0.050 mg/L. The levels allowed by the draft permit are 10 times the MCL for iron and 40 times the MCL for manganese—just like the Shepherd Bend NPDES permit. By comparison, the BWWB points out that the 2007 daily average raw water concentrations for iron and manganese at the Mulberry Fork’s Western Filtration Plant were 0.057 mg/L and 0.079, respectively. Thus, the permits allow significant degradation of current source water quality. Iron and manganese can cause serious aesthetic problems with drinking water, including taste and staining of clothes or basins. The BWWB states that the permitted increase in iron and manganese levels (as well as sediment) can lead to greater demands on treatment operations as well as increased treatment costs. Typically, these costs must be passed on to consumers.

In addition to iron and manganese, there are many other contaminants of concern associated with coal that can affect source water, drinking water quality and treatment costs. The BWWB points to arsenic, sulfur, salinity, mercury, lead, zinc, copper and cadmium (among others) as elements that are associated with Alabama’s coal deposits, specifically those near the Mulberry Fork and the drinking water intake. If iron and manganese are present in concentrations that greatly exceed recommended levels for safe drinking water, the BWWB states that it is also reasonable to expect that these other toxic pollutants associated with coal mine drainage will also greatly exceed levels protective of aquatic life and water quality. The BWWB comment letter incorporates extensive data about the possible impacts of mining on aquatic resources and the public water supply. If you are interested in reading the letter in full, it is available on ADEM’s “eFile” system (<http://edocs.adem.alabama.gov/eFile/>) under Permit No. 0079936.

We urge the Board of Trustees to consider these points carefully. In sum, the BWWB’s comments conclusively demonstrate that locating coal mining operations so close to a public drinking water supply simply cannot and should not happen. As we noted in earlier correspondence, without the consent and full participation of the University of Alabama System, it may not be cost effective to mine Shepherd Bend, as the System apparently owns land and/or mineral rights for much of the proposed mine.

In light of the concerns and permit deficiencies outlined above, Black Warrior Riverkeeper renews its request to the Board of Trustees not to lease land or mineral rights for the Shepherd Bend Mine. We would appreciate your sharing this letter with the other members of the Board of Trustees. Given the intense public interest that this issue has generated, we also ask that any potential discussion or decision to lease land or mineral rights to Shepherd Bend, LLC be included on the publicly available meeting agenda should the Board of Trustees take up this issue.

If you have any questions or should you require any additional information, please do not hesitate to contact us. Please know that we appreciate your consideration of the information we have provided in any decision you may make about a sale or lease of the System property to Shepherd Bend, LLC or any other mining company.

Sincerely,



Nelson Brooke
Riverkeeper



Eva Dillard
Staff Attorney
Black Warrior Riverkeeper, Inc.

cc: Dr. Malcolm Portera, Chancellor
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