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Lisa P. Jackson, Administrator
US EPA Headquarters
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, D. C. 20460

Via Electronic Mail Only

Dear Administrator Jackson:

Black Warrior Riverkeeper, Inc. is a non-profit organization located in Birmingham, Alabama, whose mission is to protect and restore the Black Warrior River and its tributaries. Like so many others, we are encouraged by your recent testimony on drinking water safety before the U.S. Senate Committee on Public Works and the Environment. We agree that it is critical for EPA and its partners to enhance drinking water protection to address the growing number of possible contaminants that threaten public water supplies. However, here in the state of Alabama, even conventional toxic pollutants addressed by the Safe Drinking Water Act are allowed to compromise the safety of our drinking water. We ask for your help and that of Region 4 to address this critical water protection and public health issue.

Our state environmental agency, the Alabama Department of Environmental Management (ADEM), issued a National Pollutant Discharge and Elimination System (NPDES) permit to Shepherd Bend, LLC for a 1,773 acre strip coal mine. The Shepherd Bend Mine will discharge wastewater 800 feet upstream of a public drinking water intake on the Mulberry Fork of the Black Warrior River that supplies over 200,000 people with their drinking water each day. While we are challenging that NPDES permit with our partner the Southern Environmental Law Center, the administrative process provided by law pays great deference to permitting decisions by ADEM. The Birmingham Water Works Board (BWWB) is challenging the mining permit issued by the Alabama Surface Mining Commission (ASMC), but that administrative process affords similar deference to the ASMC.

We are part of a collaborative group of environmental stakeholders, students, community residents and the BWWB who oppose the mine because of the demonstrable harm the mine's operations will cause our drinking water. The inadequate permit issued by ADEM only monitors and limits pH, total suspended solids, iron and manganese. It completely ignores the many other toxic pollutants associated with coal mining in our region. And it is important to note that the NPDES permit contains a precipitation exemption that suspends limitations *entirely* when it rains.

In the words of the BWWB, the proximity of this coal mine to a major municipal water supply intake is "unprecedented." Mines like Shepherd Bend have a "high potential for adverse impacts to the Birmingham drinking water supply" and the ADEM permit "is not protective of the designated uses of

Mulberry Fork.” The BWWB points out that permits for mines like Shepherd Bend appear 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 NPDES permit are not protective of water that is designated public water supply. The Shepherd Bend permit allows 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 Shepherd Bend permit are 10 times the MCL for iron and 40 times the MCL for manganese. 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 the sediment) can lead to greater demands on treatment operations as well as increased treatment costs. Typically, these costs must be passed on to consumers. The 200,000 consumers served by the drinking water intake are primarily lower income residents of Adamsville, Graysville, West Jefferson, Ensley, Fairfield, parts of downtown Birmingham, Fultondale, West End and the Valley Avenue/Greensprings area of Homewood.

In addition to iron and manganese, there are many other contaminants of concern associated with coal that can affect public health, 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. These additional pollutants of concern are not even monitored under the Shepherd Bend NPDES permit. The BWWB has compiled extensive data about the possible impacts of mining on aquatic resources and the public water supply. That data was developed as a part of Shepherd Bend’s NPDES permit file (AL0079162); their Alabama Surface Mining Commission (ASMC) file (P-3945); and as part of another, similar draft NPDES application (AL0079936) for Reed Mine No. 5, a mine that also has been proposed upstream of the BWWB drinking water intake. Those files are publicly available on the ADEM and ASMC websites if you would like more information.

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. Yet the permits issued by both ADEM and the ASMC set this dangerous precedent.

While we continue our efforts to educate the public about the risk to their drinking water, with the issuance of the necessary permits we are now fighting an uphill battle. We hold out the hope that one or both of the administrative appeals may succeed. In the meantime, we welcome any involvement or influence by EPA that could help us protect our drinking water. We know that you are passionate about water quality and that water issues have long been a focus of your work.

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 our letter and our request for help to make sure that Shepherd Bend Mine does not become an unfortunate reality.

For the River,



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Riverkeeper



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cc: Gwen Keyes Fleming
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