December 1, 2004

James Fulton, Chief
Office of Surface Mining
Reclamation & Enforcement
Denver Field Division
P.O. Box 46667
Denver, Colorado 80201-6667

Re: Response to 2004 Public Outreach Letter

Dear Mr. Fulton:

This letter is in response to your letter dated November 15, 2004. The Office of Surface Mining (OSM) has asked for the Division of Oil, Gas and Mining (OGM) to provide an explanation of Utah’s regulatory program requirements regarding impacts of coal mining on water resources and appropriated water rights as described in the four irrigation companies’ letter dated October 13, 2004. We hope the following discussion will provide the explanation requested.

Utah’s regulatory program requires all coal mining operations to implement a surface and groundwater monitoring program as a condition of mining. These monitoring programs are used by OGM staff hydrologists and the Operator to assess coal mining and reclamation activity and its effect upon the quality and quantity of surface and ground water in the permit and adjacent areas. The Mining and Reclamation Plan (MRP) must contain a map of all water sources and describe the associated water rights (R645-724.100). Quantity of water is part of the water right description.

The Probable Hydrologic Consequences (PHC) determination (R645-301-728) requires an Operator to make a finding as to whether or not underground coal mining and reclamation activities conducted after October 24, 1992 may result in contamination, diminution or interruption of State-appropriated water. The Division reviews the PHC determination to ascertain if it and any subsequent remediation plans are based on sufficient information. In a separate action, the Division makes a finding in the Cumulative Hydrologic Impact Assessment (CHIA) as to whether or not the proposed coal mining and reclamation operation has been designed to prevent material damage to the hydrologic balance outside the permit area.
In the Wasatch Plateau coal mining areas of Utah (the locale of the irrigation companies), ground water is found principally in two configurations: 1) in numerous small, localized perched systems and 2) in the coal seams and adjacent rocks of the lower Blackhawk Formation and the underlying Star Point Sandstone. Most of the water intercepted during coal mining flows from the roof of the mine, this indicates that the water has been stored in perched, discontinuous channel sandstone lenses in the Blackhawk Formation. When these channels are intercepted during mining, the sandstone lenses drain water for a few weeks and eventually cease to flow. This characteristic infers water sources are limited in size. Water is also encountered in saturated fractures or faults in the Star Point Sandstone and seeps up through the floor of the mine. Both of these examples of ground water interception indicate a limited interconnectivity to surface waters.

The Division of Water Rights is the water rights authority in the state of Utah (UCA 73-3-2-1.1). Baseline hydrologic and geologic information is used to determine the impact of mining activities upon the water supply (R645-301-731.530). Staff hydrologists review the water monitoring data quarterly and provide timely written findings regarding any trends or changes and impacts of mining on the hydrologic balance. The permittee is required to replace any State-appropriated water supply that is contaminated, diminished or interrupted by underground coal mining activities.

The letter to OSM dated October 13, 2004, from the four irrigation companies, claims that the Skyline and SUFCO mines are depleting their water resources and ask for replacement or mitigation. Based on the continued water monitoring data submitted by the mines and analyzed by the Division we have been unable to detect any loss, contamination or interruption to streams, springs, or wells that cannot be explained by the ongoing five-year drought. The Division believes that until an observed change in water quantity or quality is detected by OGM, or that data is presented by the irrigation companies the mines cannot be required to replace the water.

Subsequent to the letter from the irrigation companies, the Division met with the Division of Water Rights and discussed the issue of State appropriated water, interbasin diversion of mine water, and “old” and “new” water. The Division of Water Rights position is that there is no “old” or “new” water and that unless otherwise demonstrated, all groundwater is tributary to the surface waters within the watershed. As a result, the Division is re-examining its regulations to determine if the rules regarding water replacement apply even if the water monitoring data cannot detect a loss.
The irrigation companies of Emery County also allege that the drying up of natural springs on the Gentry Mountain, Bear Canyon, East Mountain, Trail Mountain and the Muddy Creek drainage is directly linked to coal mining in the area. In general, the Division has not been able to detect any loss, contamination or interruption of State-appropriated water rights to streams, springs, or wells in these areas that cannot be explained by the continued drought. However, the areas of alleged impacts are large and the Division will continue to meet and work with the irrigation companies to obtain specific locations of affected springs.

The irrigation companies requested a meeting to discuss these issues and the Division will arrange for such a meeting in the near future. Thank you for the opportunity to explain the Division's implementation of the Utah Coal regulations.

Sincerely,

Mary Ann Wright
Acting Director

cc:
Susan White
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Dennis Ward
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