

IMPLEMENTATION OF EPA'S NEW WESTERN ALKALINE COAL MINING SUBCATEGORY ¹

J.P. Tinger and J.R. Galetovic²

Abstract: The discharge of wastewater from coal mines is regulated under the Environmental Protection Agency's effluent limitations for coal mines at 40 CFR Part 434. In January 2002, EPA promulgated a new Western Alkaline Coal Mining Subcategory to control erosion and sediment. The new subcategory will cover alkaline mine drainage from reclamation areas and certain non-process areas in the arid and semiarid west.

Although the previous regulations established effluent limitations for reclamation areas, the regulations required all reclamation areas throughout the U.S. to meet the same discharge limits. These regulations basically required the construction of large sediment ponds to control sediment. The construction of large sediment ponds in the west to contain runoff from areas that naturally contain large amounts of sediment can result in non-water quality impacts that harm the environment, including disturbing the natural hydrologic balance and impacting large areas of land for pond construction. To address these impacts, EPA has established a new subcategory that requires coal mine operators to implement BMPs so that post-mined lands are reclaimed to mimic natural conditions.

The new regulations require that a coal mining operator must design and implement BMPs to maintain the average annual sediment yield equal to or below pre-mined, undisturbed conditions. This will ensure that natural conditions are maintained, and will not allow a coal mining operator to increase the discharge of sediment over background conditions. To achieve these results, EPA will require that the operator develop a site-specific sediment control plan using established watershed modeling techniques. EPA's regulations and guidance documents are available at www.EPA.gov/ost/guide/coal.

Additional Key Words: sediment modeling, reclamation, regulations.

¹Oral presentation was made at the 2003 National Meeting of the American Society of Mining and Reclamation and The 9th Billings Land Reclamation Symposium, Billings MT, June 3-6, 2003. Published by ASMR, 3134 Montavesta Rd., Lexington, KY 40502.

²John Tinger is an Environmental Engineer, U.S. Environmental Protection Agency; 75 Hawthorne St. (WTR-5); San Francisco, CA 94110; phone 415 972-3518; fax 415 947-3545, Tinger.John@EPA.gov. Joe Galetovic, Technical Coordinator; U.S. DOI, Office of Surface Mining, 1999 Broadway, Suite 3320, Denver, CO 80202; 303 844-1448; fax 303 844-1522; jgaletov@osmre.gov.