

# STATE OF COLORADO

## DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

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### MEMORANDUM

John W. Hickenlooper  
Governor

Mike King  
Executive Director

Loretta Piñeda  
Director

**To:** Bob Oswald

**From:** Tim Cazier, P.E. 

**Date:** November 15, 2012

**Re:** Permit No. M-2012-032, Revenue Mine Stormwater Ponds – Modified Design Criteria

The Division of Reclamation, Mining and Safety (DRMS) engineering staff has agreed to alternative design criteria for stormwater pond spillways based on discussions with the Operator's consultant, Greg Lewicki. The DRMS generally requires spillways to be designed to pass the peak flow resulting from the 100-year, 24-hour design storm, assuming the ponds are full (to the emergency spillway invert elevation) at the onset of the design storm. However, based on site specific conditions; including consequence of failure, background environmental conditions, and small pond design volume; the DRMS will agree to the following revised pond design criteria:

**Revenue Mine project stormwater pond spillways shall to be designed to pass the peak flow resulting from the 100-year, 24-hour design storm, assuming each individual pond has the equivalent of the 10-year, 24-hour runoff volume stored in each pond at the onset of the design storm.**

If either you or the applicants have any questions regarding the comments above, please call me at (303) 866-3567, extension 8169.