

June 9, 2003

TO: Internal File

FROM: Peter H. Hess, Environmental Scientist III/Engineering, Team Lead

RE: West Ridge Division Order, Reclamation Plan for Portal Highwall Area, West Ridge Resources, Inc., West Ridge Mine, C/007/041-DO00A-7

SUMMARY:

Due to the implementation of a more extensively constructed highwall area at the West Ridge portals than what was approved by the original permit, the Division and the Permittee have generated six deficiency documents/responses to what has become to be known as Appendix 5-9. Agapito and Associates, Inc. generated several slope stability analyses for the design, all of which have created concerns within the Division. The latest response from the Permittee proposed two plans; Appendix 5-9 proposes to reclaim the portal highwall at a 40-degree vertical angle. Appendix 5-10 proposes to reclaim the same area at a lesser angle. This gentler slope would require moving the toe of the reclaimed slope approximately forty feet to the northwest. As the original location of the right fork of the "C" Canyon drainage exists parallel with the tow of the highwall, the channel would also have to be moved forty feet to the northwest.

TECHNICAL ANALYSIS:

RECLAMATION PLAN

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

TECHNICAL MEMO

Analysis:

Hydrologic Reclamation 

Appendix 5-10 is incomplete at this time, as it fails to include designs for a relocated channel for the right fork of the "C" Canyon drainage. Appendix 5-10, if approved, would reclaim the portal highwall area at a thirty-two degree vertical angle slope. This would move the toe of the reclaimed area approximately forty feet to the northwest, requiring moving the right fork drainage the same amount. Thus, approximately five hundred feet of channel will have to be reconstructed.

According to the State Engineer's Office (Price, Utah), the need to obtain a stream alteration permit is based on the vegetation that has been established in the riparian area of the channel down stream of the proposed relocation. If the area contains grasses, willows, cattails, and other flora related to areas that generally receive abundant quantities of slow moving flow, a stream alteration application/approval would be required.

At present, the MRP classifies the "C" Canyon drainage as ephemeral (See West Ridge MRP, Volume 3, Chapter 7, page 7-5, Section 724.200, Surface Water Information, Paragraph 2). However, the drainage covers an area that is larger than one square mile and by definition is considered intermittent. The Permittee needs to provide a discussion/demonstration that indicates the drainage is truly ephemeral and does not require a stream alteration permit. This can be accomplished by discussing flow records, flora (as outlined above), and photos of the channel that currently exist in the MRP.

The Permittee occasionally discharges mine water into this drainage through a UPDES permitted discharge point. Other than that, the only time the channel generally flows is in response to a thunderstorm or snowmelt within the contributing watersheds.

As part of the required designs necessary to make Appendix 5-10 a complete plan, with a potential for approval, the Permittee should evaluate the need to apply for and/or receive a stream alteration permit from the Utah State Engineers Office.

Findings:

Appendix 5-10 is deficient in that it does not address the requirement to determine the need to obtain a stream alteration permit from the State Engineer's Office. Prior to approval, the Permittee must act in accordance with the following:

R645-301-742.320, Appendix 5-10 does not address the requirements for the need to obtain a stream alteration permit from the Utah State Engineers office.

RECOMMENDATIONS:

The permittee must investigate the need for a stream alteration permit and submit that finding to the Division as part of the designs to relocate the right fork of the "C" Canyon drainage.