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STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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May 30, 1988

TO: Sue C. Linner, Permit Supervisor/Reclamation Biologist

FROM: James Leatherwood, Reclamation Soils Specialist

Re: Technical Analysis, Aberdeen Mine Development, Andalex Resources, ACT/007/019, Folder No. 2, Carbon County, Utah

UMC 817.48 Hydrologic Balance: Acid-Forming and Toxic-Forming Materials

Existing Environment and Applicants Proposal

The permit application package states that there is no acid- or toxic-forming materials. No physio-chemical data has been supplied to the Division to verify this finding. According to the data from two sample points, submitted in the April 13, 1987 Permit Application Package (PAP) submittal, Chapter IV, II Laboratory Analysis and discussion by Jim Robbins of Camp, Dresser, and McKee, the roof and floor materials may be considered an acid- or toxic-forming. The acid base potential was calculated to be -6.35 and -5.26 tons $CaCO_3$/1000 tons material for samples 2 and 12, respectively. In accordance with the Division's Topsoil and Overburden Guidelines any material with an acid production potential of -5 tons $CaCO_3$/1000 tons material or less is considered to be a potential acid- or toxic-forming material.

Compliance

There was not sufficient data to determine the extent or variability of any potential acid- or toxic-forming materials. The Division requested further analysis of the roof and floor materials to adequately determine the potential presence of acid- or toxic-forming materials. The exact physio-chemical characteristics of the acid- or toxic-forming material must be quantified to determine the extent of such materials and to determine an adequate management plan to mitigate any potential adverse effects to water quality.

According to the PAP no underground developement waste will be disposed of outside of the underground workings. Therefore there exist only an probable potential impact to the ground water resource.

Stipulation

UMC 817.48 - (1) - JSL

Within 90 days of permit approval, the operator shall submit to the Division, a commitment to further characterize the potential acid- or toxic-forming potential of the roof and floor materials. If said analysis indicates that a potential acid-or toxic-forming exist then an acid- or toxic- forming mitigation plan shall be submitted to the Division. The proposed mitigation plan shall meet the requirements of UMC 817.103 and this section.

JL/as
cc: D. Darby
R. Harden
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