

STATE OF COLORADO

John W. Hickenlooper, Governor
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Executive Director and Chief Medical Officer

Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

September 28, 2011

SEP 30 2011

Mr. John Hamrick
Vice President of Milling Operations
Cotter Cañon City Milling Facility
Cañon City, CO 81215-1750

Re: **NOT APPROVED** – Conceptual Cover Design for the Tailings Impoundments, Cotter Cañon City Milling Facility, Cañon City, Colorado

Dear Mr. Hamrick:

The Radiation Management Unit (RMU) of the Colorado Department of Public Health & Environment (CDPHE), Hazardous Materials and Waste Management Division (Division) has reviewed the "*Update of the Tailings Reclamation Plan for the Primary and Secondary Impoundments*" (Plan). The Plan is dated March 2011, and updated appendices were received by the RMU in May, June, and July of 2011.

On May 13, 2011, the Division sent you a letter detailing our specific concerns with the Cotter preferred conceptual cover design. In general, our major concerns expressed in that letter included the proposed cover section, with the top 6-ft of soil mass being considered the radon barrier, several issues with the numerical modeling, lack of a biota barrier or other means to prevent animal intrusion, and the extremely flat cover slope top deck (0.5%). A meeting was held on July 18, 2011 between Cotter, MWH, and the RMU to discuss these concerns. At the conclusion of that meeting, it was our understanding that MWH, with concurrence by Cotter, would evaluate the issues, and provide the RMU with an alternative conceptual cover design. At a September 23, 2011 meeting, the RMU was surprised to learn that a new conceptual cover design for the Cotter impoundments would not be presented. Rather, the issues were again discussed, and we were informed of a similar approach that was used for closure of a Title II site in the state of Washington. The RMU agreed to relook at the conceptual Cotter cover design and decide within two weeks whether it is acceptable.

It is the decision of the RMU that the current cover design concept is not acceptable, and a new or revised concept shall be submitted to the RMU within 45-days. The RMU will not accept a design that includes the radon barrier as part of the soil mass of a water balance cover. As previously discussed, if Cotter prefers to use a water balance cover approach compared to a traditional "barrier layer and riprap" approach, the RMU still expects an appropriate radon

barrier that is distinct from, and is protected by, any cover soil mass that is given credit to act as the "sponge" in a water balance system. In addition, the Division will not accept a water balance cover that has a 0.5% slope, but rather must be designed with a minimum 2% or greater slope.

The RMU emphasizes that the conceptual cover design is a key component to overall site reclamation activities as well as the license renewal process. If you have any questions, please do not hesitate to call me at 303-692-3423 or email at steve.tarlton@state.co.us or contact Larry Bruskin at 303-692-3384 or email at larry.bruskin@state.co.us.

Sincerely,



Steve Tarlton, Manager
Radiation Program
Hazardous Materials & Waste Management Division
Colorado Department of Public Health & Environment

SFT:ljb

cc: Amory Quinn, Cotter
Clint Strachan, MWH
Melanie Davis, MWH
Phil Egidi, CDPHE/GJ
Edgar Ethington, CDPHE

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