STATE OF COLORADO

John W. Hickenlooper, Governor
Christopher E. Urbina, MD, MPH
Executive Director and Chief Medical Officer

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

4300 Cherry Creek Dr. S.
Denver, Colorado 80246-1530
Phone (303) 692-2000
Located in Glendale, Colorado

Laboratory Services Division
8100 Lowry Blvd.
Denver, Colorado 80230-6928
(303) 692-3090

http://www.cdphe.state.co.us

Colorado Department
of Public Health
and Environment

AUG 1 2 2011

Mr. John Hamrick
Cotter Cañon City Milling Facility
P. O. Box 1750
Cañon City, Colorado 81215-1750

Subject: Contamination Conceptual Model and Site Characterization

Dear Mr. Hamrick:

The discovery of Trichloroethene (TCE) and the existence of elevated concentrations of uranium and molybdenum in ground water west of what has been considered the principal source area of contamination raise questions about the conceptual model of contamination at the Cotter Mill. The evidence so far presented does not support the present Mill area as being the only source for uranium, molybdenum, and TCE contamination found in the well 802 area. The Department believes that characterization of soil and ground water in the vicinity of the mill is incomplete and this lack of characterization impedes adequate decommissioning.

Under Criterion 5 of Part 18 of 6 CCR 1007-1Cotter Corporation is required to have a ground water monitoring program for basic ground-water protection standards as imposed under 40 CFR Part 192. Cotter does not have a monitoring program of adequate scope in the vicinity of the present mill. Regulation 6 CCR 1007-1 §18.8.6 requires demonstration that the site is suitable for unrestricted release prior to license termination. Soil characterization is part of that demonstration. Source and extent of uranium, molybdenum, TCE, and other possible hazardous constituents and by-product materials in soil and ground water must be fully characterized.

An aggressive and thorough soil and ground water characterization is needed to characterize the mill area and adjacent areas. Specifically, this means evaluating the soil and ground water associated with buildings, pipe chases, sumps, and runoff channels in the mill area. This includes evaluating the soil and ground water east, west, and south of the mill area. The Department does not fully concur with the conclusions of your letter of July 29, 2011 in that we do specifically require a robust data quality objectives process, a data quality assessment for historical data, historical site assessment documented in characterization plans and reports. As mentioned in the July 18, 2011 meeting; plans for removal and mitigation of wetlands needs to be evaluated and presented, as that may involve other agencies.

AUG 1 2 2011

The principle chemicals of concern are uranium, radium, thorium, molybdenum, TCE, PCBs, and kerosene/diesel-range organics. However, the complete list of chemicals given in Criterion 10 of Part 18 needs to be addressed as a part of decommissioning. In addition to the characterization requirements of decommissioning there are characterization needs for addressing the CERCLA process. I think it is preferable to have a comprehensive characterization effort rather than several efforts of limited scope. NUREG-1620, Rev. 1 provides minimum decommissioning planning requirements for uranium recovery facilities. NUREG-1757, Volume 1 may be of additional help in scoping the nature of the reports (recognizing that it is geared toward 10 CFR 40 Subpart E and not UMTRA).

Cotter Corporation is directed to develop a comprehensive characterization and monitoring program for soil and water in and about the mill area. Please submit this plan with an implementing schedule within 60 days of receipt of this letter.

If you have any questions or would like to set up a meeting, please call Edgar Ethington at (303) 692-3438, or myself at (303) 692-3423.

Sincerely,

Steve Tarlton, Manager
Radiation Control Program
Hazardous Materials and Waste Management Division

SFT:ee/pve

CC Edgar Ethington; CDPHE
Phil Egidi; CDPHE
Fran Costanzi: EPA
Jerry Goad; AGO
File: Cotter, 369-01; 3.2