STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY
Department of Natural Resources

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COLORADO DIVISION OF RECLAMATION MINING & SAFETY

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Director

October 19, 2012

Mr. John Hamrick
Cotter Corporation
P.O. Box 1750
Canon City, CO 81215

Re: Schwartzwalder Mine, Permit No. M-1977-300
Amendment AM-04, Adequacy Comments (Round 2)

Dear Mr. Hamrick:

DRMS has reviewed your September 21, 2012 submittal, and has the following comments. The comments below are numbered to follow in sequence with the 25 comments provided in our letter of August 29, 2012.

26. Please identify the criteria that must be met before ceasing the mine pool pumping that maintains the mine pool elevation at an elevation at least 150 feet below the Steve Level.

27. *(This comment is intended to address comment 3 from DRMS's August 29 letter.)* Returning reverse osmosis (RO) concentrate to the water in the underground workings of a uranium mine, and then performing in-situ biologic treatment on the water, is a unique approach to mine water treatment. The outcome of this approach may be unpredictable. Please provide a description of:

    a. Previous barrel testing of in-situ biologic treatment (see Section 10.2.2 of Schwartzwalder Mine Hydrologic Evaluation of Mine Closure and Reclamation, 2007),

    b. A plan for conducting pilot-scale testing of disposing RO concentrate and in-situ biologic treatment inside the pumped down mine pool prior to full-scale disposal and treatment inside the pumped down mine pool,

    c. The expected secondary effects resulting from the creation of strongly reducing conditions in the mine pool,

    d. The expected effect of RO treatment residuals on the mine pool treatment process, and

    e. The expected effect of organic carbon on the RO treatment process.

28. *(This comment is intended to address comment 4 from DRMS's August 29 letter.)* Please provide a printout of results of model projections for the RO system.

29. *(This comment is intended to address comment 5 from DRMS's August 29 letter.)* Please provide a contingency plan for disposing RO residuals outside the mine pool, should pilot-scale testing or full-scale testing indicate returning the residuals to the mine pool is not feasible.

30. Please describe your involvement with EPA regarding UIC permitting requirements for the work proposed in your submittal.

31. Please provide a contingency plan and schedule for a scenario in which UIC permitting cannot be completed in time for meeting the schedule shown in Figure 3.

32. Please commit to having the installation of the well in the south waste rock pile overseen by a knowledgeable and trained hydrogeologist/geologist, and also commit to utilizing experienced personnel for correctly installing the well.

33. Please commit to having the pan lysimeter installation overseen by a knowledgeable and trained hydrogeologist with pan lysimeter experience.

34. Please describe how you will access shaft 2 when installing the pump.

35. Please describe the disposal method and process for spent resin or waste from the ion exchange treatment process (e.g., shipping quantities, shipping frequency, disposal location).

36. DRMS is preparing a reclamation cost estimate for the work proposed in your September 21, 2012 submittal, and will provide you a copy of the estimate when it becomes available.

Sincerely,

Tom Kaldenbach

Tom Kaldenbach
Senior Environmental Protection Specialist

cc: Tony Waldron, DRMS
Tom Mountfort, Denver Water