

## Pennsylvania Department of Environmental Protection

## P.O. Box 8469 Harrisburg, PA 17105-8469 July 21, 2000

**Bureau of Radiation Protection** 

717-787-2480

Fax: 717-783-8965

Larry W. Camper, Chief U. S. Nuclear Regulatory Commission Decommissioning Branch Division of Waste Management Office of Nuclear Material Safety and Safeguards Washington, D.C. 20555-0001

40-8778

Dear Mr. Camper:

As indicated in my July 14, 2000 letter providing Bureau of Radiation Protection (BRP) comments on the NRC's Environmental Assessment (EA) for the Molycorp, Incorporated, ferrocolumbian alloy production facility located in Washington, PA, BRP has reviewed Molycorp's Decommissioning Plan - Part 1(DP-1), and our comment are provided in this letter. In addition to reviewing the DP-1, dated June 30, 1999, (but which was only recently provided to BRP), we have also reviewed supplemental information provided by Molycorp in their letters of April 3, May 12 and May 15, 2000, and the Site Characterization Report prepared by Foster Wheeler in January 1995.

BRP has the following comments that we believe should be resolved prior to NRC approval of this work:

- 1. Many of the comments provided in BRP's July 14, 2000 letter commenting on the NRC's EA are also applicable to the DP-1. Specifically Comments Number 5 17 are applicable to the DP-1.
- 2. As stated in Comment Number 1 of BRP's July 14 letter, we are concerned that actions proposed for Part 1 of the decommissioning should not preclude any feasible option for disposal of the radioactive waste in Part 2 of the decommissioning. Molycorp should ensure that actions taken in the consolidation of waste in Part 1 do not preclude offsite disposal as a viable option in Part 2. For example, stockpiling of the waste should be performed in a manner such that offsite disposal could be carried out, consistent with good ALARA practices.



- 3. The DP 1 soil sampling plan should provide samples with sufficient volume to permit splitting samples with BRP for independent verification of Molycorp's analysis results. NRC should keep BRP informed of progress at the site to ensure that split samples are available prior to backfilling with clean soil. In addition, BRP should be kept informed of general progress in the site cleanup activities to permit independent survey measurements by the Commonwealth.
- 4. The thorium concentration maps of Figures 2-1 through 2-7b show levels of contamination ranging from 30 to 500 pCi/gm total thorium in the slag pile area. However, sampling results reported for the slag pile are higher than 1000pCi/gm. Although Molycorp explains in their April 3 letter that data from the slag pile are not included because this would invalidate the site-wide modeling for thorium distribution, the DP-1 figures should be clarified to indicate that the slag pile is not included.
- 5. The DP-1 should address precautions to be taken because of the potential for elevated levels of radium and radon, as well as heavy metals (non-radioactive).
- 6. The DP-1 states that the duration for temporary storage of contaminated radioactive soils will typically not exceed two to three weeks. In order to meet this objective, it appears that resolution of the final disposal location (Part -2) will be necessary shortly after initiation of Part-1 remediation work. BRP would appreciate being informed of the plans for approval of DP-2, relative to the planned authorized start of site work for DP-1.
- 7. Scans for surfaces of affected building described in Section 4.6 should be clarified. Lower walls are required to be 100% surveyed only up to 2 meters above the floor. Above 2 meters, scans are to be performed only where direct measurements are performed, (i.e. where the characterization survey has detected no activity above 5,000 dpm/100 cm<sup>2</sup>, per Section 4.7.1). However, Section 4.6 is silent for walls and other surfaces more than 2 meters above the floor where characterization has shown levels above 5,000 dpm/100 cm<sup>2</sup>.
- 8. Section 4.7.1 states that if scanning methods produce a minimum detectable activity (MDA) that exceeds 1,000 dpm/100 cm<sup>2</sup>, the measurements will be performed at one meter intervals in lieu of 2 meter intervals. Since the unrestricted release criteria for thorium contaminated surfaces is an average of 1,000 dpm/100 cm<sup>2</sup>, it is unclear that statistically significant measurements can be obtained with this high MDA. Molycorp should demonstrate that meaningful measurements will be obtained or take steps to reduce the MDA.

- 9. In the sampling of surface soil for Unaffected Areas discussed on page 4-5, (misnumbered Section 4.7.1), the 30 samples should be specified to be randomly located within the survey unit, in accordance with the guidance of NUREG/CR 5849.
- 10. The sampling of subsurface soil discussed on page 4-5 (misnumbered Section 4.7.2) specifies that soil samples will be taken at the completion of the excavation. It should be clarified that these final radiological status survey samples will be taken prior to backfill with clean soil to ensure that results obtained are representative of the remediated area, not the backfill.

We are available to meet with NRC and Molycorp to discuss these comments, if desired. Whether, or not, there is a meeting, we would appreciate receiving a written response to these comments. If you have any questions, or wish to arrange a meeting, please call Mr. Robert Maiers at 717-783-8979.

Sincerely,

David J. Allard, CHP

Director

**Bureau of Radiation Protection** 

cc: Denise Chamberlain, DEP, ARRP
James Snyder, DEP, BLRWM
Robert Maiers, DEP, BRP
Roy Person, NRC

bcc: James Yusko, DEP, SWRO, RPP

Roy Woods, DEP, SWRO, RPP John Herman, DEP, SWRO, OCC Tony Orlando, DEP, SWRO, WMP

Bernard Snyder, Consultant Dave Allard, DEP, BRP Rennard, Reading File

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