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MOLYCORP

26 May 1994

Mr. Chad J. Glenn, Project Manager  
United States Nuclear  
Regulatory Commission  
Decommissioning and Regulatory  
Issues Branch  
Division of Low-Level Waste  
Management and Decommissioning  
Office of Nuclear Material Safety  
and Safeguards  
Washington D. C. 20005-0001

**Proposed Modifications to the  
Site Characterization Plan**

Dear Mr. Glenn:

I am forwarding to you a request to adjust the elements of three tasks in the site characterization study now under way at the site. The requests were recommended and prepared by Enserch Environmental Corp., the hydrogeological consultants we hired to characterize the ground water at the site. These adjustments are intended to:

- Enhance the data obtained from the study, and
- Eliminate redundant and costly tasks.

The first request involves the number of boreholes that will be converted into piezometers. This task is described in Section 4.6.10 subpart 3, page 49 of the SCP entitled "Plan for Site Characterization in Support of Decommissioning of the Molycorp, Inc. Washington, PA Facility". The revised SCP was submitted to you on 5 August 1993 and prepared by Radiation Surveillance Associates, Inc. and Vail Engineering, Inc.

As you know, we are well into our site characterization study activities and would like to maintain continuity with our drilling subcontractors, radiation and geological consultants. I would greatly appreciate your prompt attention and response to this request to proceed with excavation, and am looking forward to your favorable reply

Sincerely,

*George W. Dawes*  
George W. Dawes

GWD/jez

xc B K Dankmyer  
T P Mulloy  
CERT  
file

**ENSERCH  
ENVIRONMENTAL**  
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**MEMORANDUM**

5/13/94

TO: T. Mulloy (Molycorp)  
FROM: *L. Skoski* *R. Pennifill*  
L. Skoski/R. Pennifill  
SUBJECT: TECHNICAL BASIS FOR FIELD PROGRAM MODIFICATION

Attached is the Memorandum for the modifications of the field program. These modifications pertain to:

- o The Infiltration Test
- o Hydraulic Conductivity Measurements in the Fill Zone
- o Piezometers Installation

Please call me if you have any questions

LS:bad  
Attachment

**TECHNICAL MEMORANDUM  
BASIS FOR FIELD PROGRAM MODIFICATIONS  
MOLYCORP FACILITY  
WASHINGTON, PENNSYLVANIA**

The following describes the deviations from the August 5, 1993 Plan for Site Characterization Plan (PSC) which were made during the course of the field investigation activities. Small changes, such as modification to drilling locations to avoid utility lines are not described in this Memorandum.

**Change Notice 1: Infiltration Test**

The PSC (Task 9 - Vadose Zone, Page 58) states that the infiltration rate will be estimated from measurements of the subsidence of water versus time in shallow pools of water on the ground surface. Instead of attempting to make measurements in natural pools, the measurements will be made in general accordance with ASTM D5126-90 and D3385 using a Double Ring Infiltrometer. The use of a recognized ASTM method will yield results more likely to be acceptable to regulatory agencies and eliminate uncertainty in the calculational methodologies employed.

**Change Notice 2: Hydraulic Conductivity Measurements in the Fill Zone**

The PSC (Task 3, Hydraulic Properties of the Fill Zone, Page 49) states that trenches should be excavated in the fill material, and that a pump test shall be performed by pumping water from the trench. Instead of pumping from a trench with the inherent uncertainties which would be encountered by pumping from a trench with an irregular geometry, and the possibility that sloughing of the trench sidewalls would occur during the test, a large diameter well will be utilized.

Two, three foot diameter wells will be installed and a pump test performed at each well. Nearby piezometers will be used to obtain drawdown data during the test. The use of the wells, in place of trenches, will facilitate analysis of the data using standard methods. Two tests will be performed, instead of four. Since the work area is small two tests should provide sufficient data in the Northwest portion of the site. Since truck traffic is present in this area, it would also be difficult to install additional wells, out of the path of the trucks.

### Change Notice 3. Piezometers Installation

The PSC (Task 3, Page 49) calls for 80% of the boreholes to be completed as temporary piezometers. Instead, all borings in the northeast portion of the site will be completed as piezometers, since the spacing between some boreholes is large. In the southern part of the site, south of Caldwell Avenue, 33 of the 42 borings will be completed as wells or piezometers (80%), as originally specified. In the northwest, where soil borings are on a very dense grid (10 meter spacing) the piezometer will be installed in approximately 25% of the borings. However this is at a spacing equivalent to the spacing in the other two areas and should provide sufficient data to accurately characterize the piezometric surface in the fill zone.