

U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

INSPECTION REPORT

Report No. 040-08794/96-002

Program Code 11700

Docket No. 040-08794

License No. SMB-1408

Priority 3

Category E

Licensee: Molycorp, Incorporated  
300 Caldwell Avenue  
Washington, PA 15301

Facility Name: Molycorp

Inspection At: 350 N. Sherman Avenue  
York, PA 17403

Inspection Conducted: November 11, 1996

Inspectors:

Todd J. Jackson  
Todd J. Jackson, CHP  
Health Physicist

November 25, 1996  
date

Approved By:

Ronald R. Bellamy  
Ronald R. Bellamy, Ph.D., Chief  
Decommissioning & Lab Branch  
Division of Nuclear Materials Safety

November 26, 1996  
date

Inspection Summary: Routine, announced inspection on November 11, 1996  
(Inspection Report No. 040-08794/96-002).

Areas Inspected: Site tour; status of site facilities; calibration of equipment and instrumentation; and radioactive waste management. Independent measurements were made of two buildings, in areas where licensee surveys were in-process or completed. Corrective actions to prevent reoccurrence of a violation cited during the previous inspection were reviewed.

Results: Licensee activities at the site and decontamination work were being conducted in accordance with approved procedures, and in accordance with licensee commitments to the NRC. Corrective actions to prevent reoccurrence of the noncompliance cited during the previous inspection were found to be complete.

This item was closed. No violations of regulatory requirements were observed during this inspection.

## DETAILS

### 1.0 INDIVIDUALS CONTACTED

- \*G. Dawes, Project Manager/Radiation Safety Officer (RSO), Molycorp Inc.
- \*B. Pereyo, Project Director, IT Corporation
- J. Stokowski, Project Manager, IT Corporation
- \*S. Duce, Sr. Consultant (HP), IT Corporation
- \*D. Williams, Health Physics Site Supervisor/RSO, IT Corporation

\*Denotes those present at the exit meeting on November 11, 1996.

### 2.0 PURPOSE

The purpose of this inspection was to examine the current status of decommissioning activities and facilities at the York, Pennsylvania site. Activities reviewed included the implementation of the licensee's organization to perform the decontamination work, radiation protection programs including area surveys, calibration of equipment and instrumentation, and radioactive waste management. The inspector also conducted independent radiological measurements of selected building interior surfaces already characterized by the licensee. Licensee actions taken to address a previous violation were also reviewed.

### 3.0 SITE DECOMMISSIONING STATUS

The inspector toured the York facility to observe the current status of decontamination work. Surveys were continuing to identify locations where additional work was required to reduce contamination to less than the criteria for unrestricted release. Some buildings had been decontaminated and cleared for unrestricted use. Other buildings were being prepared for survey by removing equipment and contaminated materials .

Designated areas of the site were being used to stage contaminated equipment awaiting decontamination, to store contaminated personnel protective equipment (PPE) such as coveralls and shoe covers, and to store equipment on which decontamination activities had been completed. Dumpsters were on-site to collect and segregate different types of recyclable materials and waste being generated.

During the decontamination work some of the buildings had been found to have unsound materials incorporated into the structure. Examples of the problems encountered included crumbling bricks, powdering mortar, and leaning walls.

Structural integrity evaluations of some buildings were being performed in order to assure the structures were safe for work.

#### 4.0 ORGANIZATION AND SCOPE OF THE LICENSEE PROGRAM

The licensee's organization and project management structure had not changed since the last inspection in September, 1996. The inspector reviewed the corrective actions taken in response to the item of noncompliance described in Inspection Report 040-08794/96-001 and found them to be adequate. The licensee's contractor had provided approved copies of operating procedures for use at the site, and personnel were using these reviewed and approved procedures. Additionally, Molycorp had modified internal procedures to require review of contractor plans prior to implementation, to assure proper approvals were completed. This item is closed.

#### 5.0 INDEPENDENT MEASUREMENTS

The inspector independently surveyed areas of Building 1 and the Moly building. In Building 1, room 1, the inspector made 21 measurements of the alpha and beta emitting contamination levels on the surface of selected floor and wall survey units. Licensee survey results were compared with the inspector's measurements and found to be equivalent. The licensee had identified survey units where contamination was greater than 1000 dpm/100cm<sup>2</sup> and planned to decontaminate these areas before conducting a final survey of the surfaces in the room. Licensee survey records appeared complete, legible, and well-maintained in accordance with requirements.

The inspector used a gas proportional probe in conjunction with a scaler to independently measure the beta and alpha surface contamination in selected buildings on site. Calibrations were performed using Tc-99 and Th-230 electroplated standards. Electronic calibration for the scaler was valid through March 14, 1997.

#### 5.1 MOLY BUILDING

The licensee had submitted a report dated December 1995 to the NRC documenting a final survey of the interior structural surfaces of the Moly Building. The inspector confirmed by independent measurements at 10 points within the building that the surfaces of the building described in the final survey report were less than the 1000 dpm/100cm<sup>2</sup> release criteria, and located the exception noted in the report of a small area of higher contamination on the floor of the former laboratory. The overhead duct described in the report as contaminated had been removed. The inspector noted that the equipment

remaining in the building had not been surveyed, and that the floor drain trenches in the building had been posted as containing contamination.

The Final Survey Report did not address the equipment or the contaminated floor drains, nor did it address any planned controls to be used to prevent recontamination of the building surfaces during survey or removal of the equipment. The inspector discussed with the licensee what was planned for dealing with the equipment removal and decontamination or removal of the floor drains. The licensee agreed that details of these work plans would be provided to the NRC for review, possibly to be included as part of the plans being developed for eventual demolition of the building.

#### 6.0 EQUIPMENT AND INSTRUMENTATION

The inspector reviewed the details of the licensee's instrument calibration methodology, and confirmed through independent fixed-contamination surveys the licensee's ability to make accurate measurements. Records were reviewed of calibration frequency, data, and standard sources utilized. The types and quantities of instruments in use were similar to those observed during the previous inspection, and are described in Inspection Report 040-08794/96-001.

#### 7.0 RADIOACTIVE WASTE MANAGEMENT

The inspector discussed with the licensee methods being used to handle waste materials generated at the site. Waste materials were being segregated into contaminated consumables such as personal protective equipment (PPE), contaminated waste products such as wood, and recyclable rare earth containing materials. Roll-off dumpsters were being used to store material at the site during the decontamination work, until disposal. The licensee was investigating disposal options for the low-level contaminated trash PPE. It was planned to dispose of such trash, and to store contaminated construction/demolition type material in the rolloff dumpsters until approved by the NRC for transport and interim storage at Molycorp's Washington, PA facility.

Asbestos-containing materials had been identified at the site, some of these located within areas of contamination. As of this inspection, none of these materials had been found to be radiologically contaminated, although the potential for such mixed hazards exists at the site. The licensee was aware of the precautions necessary to deal with asbestos removal and had contacted qualified contractors to handle asbestos.

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Efforts were underway to decontaminate as much of the potential waste material as possible to enable salvage, recycling, or disposal as nonradioactive waste. Equipment removed from its installed location was surveyed for fixed and removable contamination, then labeled with a unique number and the initials of the individual performing the survey. If found to be contaminated, it was placed into a roped-off holding area until it could be decontaminated. For each piece of equipment, the licensee intended to produce documentation of the decontamination and final survey results in order to enable tracking through the process and on to the purchaser (for salvaged items) or disposal means.

#### 8.0 EXIT MEETING

The inspector met with the representatives identified in Section 1.0 at the conclusion of the inspection on November 11, 1996. The inspector summarized the purpose, scope, and findings of the inspection. The licensee acknowledged the inspection findings.