

END

Appendices:

- A. "Materials Decommissioning Inspection Field Notes for Facilities Needing Significant Decommissioning Effort"
- B. "Final Survey Program Inspection Field Notes"

APPENDIX A

MATERIALS DECOMMISSIONING INSPECTION FIELD NOTES
FOR FACILITIES NEEDING SIGNIFICANT DECOMMISSIONING EFFORT

Handwritten:
3/1/01

Region 1

Inspection Report No. 40-8781/2000-01 License No. SMB-1393 Docket No. _____

Licensee (Name & Address)

Molycorp, Inc Licensee Contact G. Dawes, P50
300 Caldwell Ave. Telephone No. 724/222-5605
Washington, PA 15301 Last Amendment No. 3
 Date of Amendment 10/99

Program Code 11800

Date of Last Inspection 10/99

Date of This Inspection 11/2000 - 1/2001

Date of Next Inspection 10/01

Type of Inspection: () Announced () Unannounced

() Routine () Special

() Initial Decomm. () Reinspection of Decomm.

Level of Inspection: () Normal () Reduced () Extended

Brief Description of Inspection Activities:

Examination of loading + shipping activities assoc w/ contaminated soil stored in rolloff boxes and slag pile.

Brief Description of Findings and Action:

Rolloff boxes + the slag pile material were packaged and shipped according to radiation protection procedures + the approved DP. Good radiation safety practices maintained; no concerns identified,

Summary of Findings and Action:

() No violations cited, clear NRC Form 591 or regional letter issued

() Violation(s), clear NRC Form 591 issued

- D. Licensee final survey required. (Y () N
- E. NRC confirmatory survey required. (Y () N
- F. NRC closeout inspection required. (Y () N
- G. Licensee doing decommissioning planning and preparation before dismantlement. (Y () N
- H. Licensee actively remediating site. (Y () N
- I. Licensee completed site remediation. () Y (N

Description of Facility Status:

Initial decommissioning inspection. Roll-off boxes w/ Findlay property material emptied + shipped to Envirocare. Slag pile which ~~constituted~~ most of above-grade source term removed / excavated + also transferred to Envirocare. Rad con activities performed by decommissioning contractor, RSI, until intermodal shipments of material completed on 2/22/01.

2. INSPECTION OF KEY DECOMMISSIONING ACTIVITIES

The following is a generic checklist of major licensee activities occurring at various stages of decommissioning. From this generic checklist and from facility-specific activities you identify, develop the set of licensee activities to be inspected - for each individual inspection throughout the decommissioning process. Plan to inspect licensee activities that present potential high-risk conditions. Then apply the standard health and safety inspection areas in Section 3 of these fieldnotes (taken from the applicable 87100 series IP for the licensee's operational program) to the specific licensee decommissioning activities that are being inspected.

To complete the licensee activities checklist, the inspector will need to obtain information from the Licensing Project Manager, review the DP, make observations at the licensee's facility, review licensee records, take measurements and samples of contaminants, and undertake other investigative measures, to determine whether the

procedures. () Y () N

11. Other licensee activities: () Y () N

Basis for Findings:

B. LICENSEE ACTIVITIES INSPECTED DURING DECONTAMINATION,
DISMANTLEMENT, AND SITE REMEDIATION

1. Site security and control of contaminated material
being maintained in compliance with
10 CFR Part 20. (✓) Y () N

2. Decontamination and dismantlement of structures
are being performed consistent with DP and
sound industry practice (structures include
buildings, utilities, treatment lagoons, etc.). (✓) Y () N

3. Decontamination and remediation of the following
are being performed consistent with DP and
sound industry practice:

- a. Soil. (✓) Y () N
- b. Sediment. () Y () N NR

c. Surface waters. () Y () N NR

d. Groundwater. () Y () N

e. Other mediums:

NR
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_____ () Y () N

4. Licensee release and disposal of decommissioning wastes are consistent with DP and approved by NRC for:

a. Liquid wastes (e.g., groundwater, surface water, liquid from treatment ponds, process liquids). () Y () N NR

b. Solid wastes (e.g., building materials, process and other facility equipment, concrete rubble, soil). () Y () N

c. Other wastes: () Y () N

5. Temporary, on-site storage of low-level radioactive wastes from decommissioning meets license conditions and guidance in IP 84890. () Y () N NR

6. Packaging and shipment of radioactive waste materials meet requirements in 40 CFR Parts 173-178 and 10 CFR Part 71. () Y () N

7. Restoration of site - Licensee has restored site to meet license conditions and NRC-approved plans. () Y () N NR

8. Licensee survey of material and equipment for free release sufficient to demonstrate compliance with release criteria. NR

9. Other licensee activities: () Y () N

Basis for Findings:

Restricted access to slag pile excavation area maintained, ^{Excavation} ~~area~~ ^{site} roped off + posted as RAM area. Process for soil removal well organized from loading to shipment of material offsite. Intermodal loading, railcar transfers, + shipping manifests in accordance with DOT requirements.

C. LICENSEE ACTIVITIES INSPECTED AFTER COMPLETION OF SITE REMEDIATION

NR

1. Licensee has submitted NRC Form 314 for disposition of licensed material in accordance with 10 CFR 30.36, 40.42, and 70.38. () Y () N

2. Licensee's final survey program is acceptable (see Appendix B for inspection items for final surveys). () Y () N

3. NRC confirmatory survey performed. () Y () N

4. Site maintenance activities (if any, for restricted use) conform to license conditions and NRC-approved plans and are in place and functional. () Y () N

5. Other licensee activities: () Y () N

Basis for Findings:

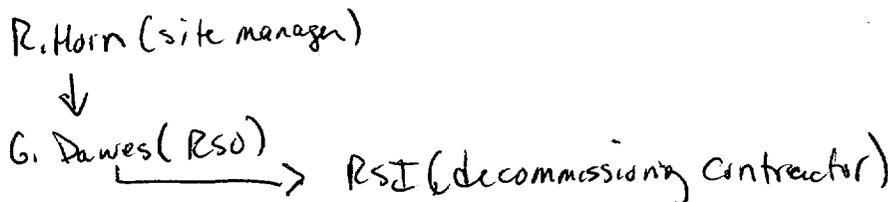
3. INSPECTION OF STANDARD HEALTH AND SAFETY AREAS FROM THE OPERATIONAL INSPECTION PROGRAM

Identify the standard inspection areas (from the inspection program of the licensee's operational program) to be covered during each decommissioning inspection. [Inspection areas A through L below correspond to the typical inspection areas in the 87100 series IPs that are applicable to decommissioning.] Then identify the new activities within the standard inspection areas undertaken by the licensee during decommissioning. Some of the new activities given below, as well as any other activities the inspector identifies, should be considered inspection items under the general set of health and safety inspection areas used in the applicable 87100 series IP.

Minimum inspection areas for the initial decommissioning inspection: decommissioning organization (A.1); decommissioning activities in compliance with NRC-approved DP (A.2); licensee procedures for implementing the DP (A.3); Radiation Safety Committee (RSC) and Radiation Safety Officer (RSO) responsibilities (A.4); and the licensee's decommissioning training program (E.1).

A. GENERAL OVERVIEW

1. Describe the licensee's decommissioning organizational structure:



2. Licensee is performing decommissioning activities in compliance with its approved DP. (✓) Y () N

4. Licensee has implemented procedures for the

decommissioning activities identified in the DP. (✓) Y () N

5. The RSC and RSO fulfill license requirements to deal with all decommissioning activities. () Y () N

Basis for Findings:

RSI. Radiation Protection Procedures approved & used. The site manager & RSO provided licensee management direction to contractor staff.

B. FACILITIES

1. Describe, from field observation, the licensee-identified facilities and outdoor areas to be decommissioned:

- 1. approx 180 pl/dff boxes
- 2. slag pile. adjacent to Caldwell Ave.

2. The licensee's remediation plan includes all the contaminated facilities and areas on-site and off-site. (✓) Y () N

3. All essential systems and services (e.g., electrical power, water supply, communications systems) are in place and functional for the planned decommissioning activities. () Y () N

4. Licensee's emergency plan is in place and operative for the duration of decommissioning. () Y () N

5. For complex sites needing site characterization, describe the key site characterization activities to be performed by the licensee to determine the

NR
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nature and extent of contamination:

6. Licensee's characterization activities performed in conformance with good industry practice. () Y () N

NR

Basis for Findings:

C. EQUIPMENT AND INSTRUMENTATION

NR

1. Survey instruments are applicable to contaminants of interest. () Y () N

2. Use of survey instruments appropriate for site. () Y () N

Basis for Findings:

D. MATERIALS

1. Radioactive materials licensed during operations

have been removed offsite; residual quantities conform to license conditions. (Y () N

2. Security and control of licensed materials, including contaminated areas, is being maintained. (Y () N

Basis for Findings:

Slag pile removal well planned. Rad controls and h.p. support staff maintained throughout all steps in removal process.

E. TRAINING

1. Licensee has developed training program for new decommissioning activities (e.g., demolition of structures, excavation of soil); program is adequate. () Y () N

2. Training program being effectively implemented. () Y () N

Basis for Findings:

Under RSI program. Orientation around site, and radiation safety overview given to new arrivals. RSI staff have background and experience to implement procedures efficiently.

F. AREA RADIATION SURVEYS AND CONTAMINATION CONTROL

1. Area surveys are being performed in areas being decommissioned. (Y () N 2. Where active remediation (e.g., demolition of

structures, excavation of soil) is being performed,
radiation levels in unrestricted areas do not exceed
2 mrem in any one hour. (Y () N

Basis for Findings:

Area scans performed routinely (daily for work areas) on equipment & structures. Air sampling @ rolloff decon area, tent enclosure, rail car loading area. Smears taken on containers & vehicles prior to UMR release.

G. RADIATION PROTECTION

1. The licensee's approved health physics program is being implemented in the field for new decommissioning activities. (Y () N *RST program*

2. Site security and control of contaminated material are in compliance with 10 CFR 20.1801 and 20.1802. (Y () N

Basis for Findings:

Inspector independent surveys showed $\approx 15 \mu\text{R/hr}$ in most areas
Pile area after excavation $> 100 \mu\text{R/hr}$, access restricted.

H. RADIOACTIVE WASTE MANAGEMENT/EFFLUENTS/ENVIRONMENTAL MONITORING

1. Offsite disposal of decommissioning wastes conforms to free release criteria and

disposal site requirements. () Y () N

2. All new effluent releases conform to DP and applicable regulations. () Y () N *NR*

3. The licensee's environmental monitoring program is being implemented in conformance with the DP and all applicable limits are being met. () Y () N ***

4. Temporary storage/staging areas for radioactive wastes from building demolition, equipment dismantlement, soil excavation, etc., are adequately posted and protected. () Y () N *NR*

Basis for Findings:

Same as above.

I. RECORDKEEPING FOR DECOMMISSIONING

1. Copies of the licensee's decommissioning cost estimates and funding methods are on file. () Y () N *NR*
2. Licensee has adequate records for decommissioning

activities performed (e.g., for decontamination and dismantlement of structures; decontamination and remediation of soil, sediment, surface waters, groundwater; surveys of remediated facilities). () Y () N

3. Licensee's financial assurance conforms with the financial assurance requirements of NRC-approved possession limits and NRC regulations. () Y () N *NR*

Basis for Findings:

J. TRANSPORTATION

Roll off boxes

material removed via backhoe to bermed area on ground.
Survey performed, then loaded into trucks + transferred to
tent enclosures @ rail car platform.
Loaded into rail cars for shipment to Envirocare

1. Describe the licensee's program to package and ship decommissioning waste materials:

slag pile

Backhoe excavation into intermodal. Direct transfer
to loading area for placement on rail cars
See attached photos.

2. Licensee's program meets all applicable 10 CFR and 49 CFR requirements for marking labeling, placarding, and shipping paper requirements for radioactive waste shipments. (✓) Y () N

Basis for Findings:

Direct observation, interviews w/ RSO + contractor staff, and shipping manifest review.

K. POSTING AND LABELING

1. All contaminated areas, waste processing areas, and waste handling areas are posted in conformance with regulations. (✓) Y () N

2. Packaged radioactive waste materials are labeled in accordance with regulations. (✓) Y () N

Basis for Findings:

no postings + package labeling observed while work was in progress.

L. OCCUPATIONAL HEALTH AND SAFETY

NR

1. Describe the occupational health and safety observations made at the licensee's facilities:

2. Licensee and Occupational Safety and Health Administration were informed of occupational health and safety issues observed during the inspection. () Y () N

Basis for Findings:

4. VIOLATIONS, NON-CITED VIOLATIONS, FOLLOWUP ITEMS, AND OTHER ISSUES

None

Briefly state (1) the requirements and (2) how and when the licensee violated the requirement. For non-cited violations, indicate why the violation was not cited.

12/15/00

roll off staging area



erosion control

Creek

Colliff





roll off cleaning area (1)



roll off clean area (2)

C04A
003



area (1)

C048



area (2)



rail car loading



1st container



#6 container (full of railcar)

lot of 3 for daily shipment

COBA
~~COB~~

12/1/00



C08B
C08



C09A
C09A



C09B





