First Five-Year Review Report

Cal West Metals Superfund Site
Lemitar, New Mexico

September 2000

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Table of Contents

TABLES

FIGURES

ATTACHMENTS

List of Acronyms

ARARs	Applicable or Relevant and Appropriate Requirements
BOR	Bureau of Land Reclamation
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
EPA	United States Environmental Protection Agency
FS	Feasibility Study
GWQB	Groundwater Quality Bureau
MCL	Maximum Contaminant Level
mg/kg	milligrams per kilogram
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NMED	New Mexico Environment Department
NPL	National Priorities List
O&M	Operation and Maintenance
OUs	Operable Units
PAHs	Polyaromatic Hydrocarbons
ppm	Parts Per Million
PVC	Polyvinylchloride
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
SBA	Small Business Administration
SI	Site Inspection
SIF	Site Inspection Follow Up
SOP	Standard Operating Procedure
SOS	Superfund Oversight Section
SSC	Superfund State Contract
TCLP	Toxicity Characteristic Leaching Procedures

Executive Summary

This is the first five-year review of the remedial action implemented at the Cal West Metals Site (the "Site") located in Lemitar, New Mexico. This review was completed in September 2000. The results of the five-year review indicate that the remedial action is protective of human health and the environment. The remedial action is functioning as designed, and the Site has been maintained properly. Five deficiencies in the remedial action were noted; however, none of these deficiencies directly impact the protectiveness of the remedy.

Both the U.S. Environmental Protection Agency (EPA)-approved Health and Safety Plan and the EPA-approved Contingency Plan are in place. These plans have been properly implemented, and are sufficient to control any risks to human health or the environment that are due to the implementation of the remedy.

The remedial action called for by the Cal West Metals Record of Decision (ROD) included on-site stabilization, on-site disposal and capping, and groundwater monitoring. The groundwater monitoring provisions of the ROD call for annual sampling, using four groundwater wells, over a five-year period, by sampling four groundwater wells annually for the first five years. After the first five years, the wells will be sampled once every five years for 25 years. In May 1996, New Mexico Environment Department (NMED) initiated the groundwater monitoring program.

The remedial action at the Site, as originally described in the ROD, has been implemented and continues to be protective of human health and the environment. Hazardous substances remain in the repository (i.e., the capped area) at the Site at concentrations levels that are above levels that allow for unlimited use of the repository and unlimited exposure to subsurface repository areas.

Five-Year Review Summary Form

SITE IDENTIFICATION

Site name (from WasteLAN): Cal West Metals

EPA ID (from WasteLAN): NMD 097960272

Region: EPA Region 6	**State:** NM	**City/County:** Lemitar, Socorro

SITE STATUS

NPL Status: ☐ Final ☒ Deleted ☐ Other (specify):

Remediation status (choose all that apply): ☐ Under Construction ☐ Operating ☒Complete

Multiple OUs? ☐ Yes ☒ No	**Construction completion date:** April 1995

Has site been put into reuse? ☒ Yes ☐ No Current occupant: truck bed fabrication co.

REVIEW STATUS

Reviewing agency: ☒ EPA ☒ State ☐Tribe ☐ Other Federal Agency:

Authors: Sabino Rivera, Birgit Landin, Greg Lyssy

Review period: 1995-2000

Date(s) of site inspection: July 31, 2000

Type of review:
- ☒ Statutory
- ☐ Policy
- ☐ Post-SARA ☐ Pre-SARA ☐ NPL-Removal only
- ☐ Non-NPL Remedial Action Site ☒ NPL State/Tribe-lead
- ☐ Regional Discretion

Review number: ☒ 1 (first) ☐ 2 (second) ☐ 3 (third) ☐ Other (specify):

Five-Year Review Summary Form

Deficiencies: (None of these five noted deficiencies in the remedial action have prevented the remedy from being protective. That is, the remedy is protective despite these relatively minor deficiencies.)

- Access to the Site is not restricted.
- The repository cell boundaries are not clearly marked or labeled. It was noted that a back-hoe attempted to dig a trench through the cell while installing a gas line.
- There are no monitoring wells directly down-gradient from the repository cell.
- Monitoring of institutional controls is not clearly assigned.
- Some monitoring wells were not locked and/or capped.

Recommendations and Follow-up Actions:

- The fence should be repaired to limit Site access.
- Mark the repository cell boundaries with fence posts painted a flourescent color, and add warning signs to the fence posts.
- Install a monitoring well down-gradient from the repository cell.
- A letter should be sent to the City, possibly by the NMED, asking the city to restrict the property to industrial use only, and to impose whatever restriction is necessary to make sure that the cap is not penetrated.
- If possible under State law, or city ordinance, an enforceable restriction (*e.g.,* an easement, or a zoning change) should be imposed on the property stating that the cap must not be penetrated. If such a restriction is not possible under State law, then a deed notice should be filed, stating that the cap is in place and that it must not be penetrated.
- Ensure that all monitoring wells are locked and capped.
- Conduct one complete round of groundwater sampling from all monitoring wells, and, based on the analytical results of that sampling, select four wells for continued monitoring. The remaining (unused) wells should be properly plugged and abandoned in order to prevent the wells from acting as potential conduits for contamination.

Protectiveness Statement(s):

The results of the five-year review indicate that the remedial action at the Site is protective of human health and the environment. The remedial action is functioning as designed, and the Site has been maintained properly. Five deficiencies in the remedial action were noted; however, none of these relatively minor deficiencies directly impact the protectiveness of the remedy.

All of the completion requirements for this Site have been met as specified in OSWER Directive 9320.2-3C, entitled "*Update No.2 to Procedures for Completion and Deletion of NPL Sites.*" Specifically, the contaminated soil and sediments have been rendered immobile by solidification/stabilization, and the possibility that future Site residents may be exposed to hazardous substances has been eliminated. The solidified and stabilized lead-contaminated waste material found at the Site was tested using the Resource Conservation and Recovery Act (RCRA) toxicity characteristic leaching procedures (TCLP), and it was found that leachate from the material had lead concentration levels below the RCRA regulatory levels. The Site groundwater, which the Remedial Investigation (RI) found to be uncontaminated, has remained uncontaminated because of the solidification/stabilization and capping of the lead-contaminated waste. Periodic groundwater monitoring shows that the groundwater has not been impacted. The remedial action at the Site, as originally described in the ROD, has been implemented and continues to be protective of human health and the environment. Hazardous substances remain in the repository (i.e., the capped area) at the Site at concentrations levels that are above levels that allow for unlimited use of the repository and unlimited exposure to subsurface repository areas.

Cal West Metals Superfund Site
First Five-Year Review Report

The United States Environmental Protection Agency (EPA) Region 6 and the NMED/Superfund Oversight Section (SOS) have conducted this five-year review of the remedial actions implemented at the Cal West Metals Superfund Site (Site) located in Lemitar, New Mexico, for the performance period of 1995 to 2000. The purpose of this five-year review is to determine whether the remedial action at the Site is protective of human health and the environment. This report documents the results of the review for this Site.

1. Introduction

This first five-year review for Cal West Metals Superfund Site is required by statute. This five-year review was conducted pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Section 121(c), 42 U.S.C. § 9621(c), the National Contingency Plan (NCP) (40 CFR § 300.430 (f)(4)(ii)), Office of Solid Waste and Emergency Response (OSWER) Directive 9355.7-02 (May 23, 1991), OSWER Directive 9355.7-02A (July 26, 1994), OSWER Directive 9355.7-03A (December 21, 1995), and draft OSWER Directive 9355.7-03B-P (draft Comprehensive Five-Year Review Guidance).

Section 121(c) of CERCLA requires that, "*If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each 5 years after initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented.*" Under the NCP, the Federal regulations which implement CERCLA, EPA is required to conduct five-year reviews of a remedial action whenever, under the remedial action, "*hazardous substances, pollutants, or contaminants are remaining at the site above levels that allow unlimited use and unrestricted exposure*" (*see* 40 CFR § 300.430(f)(4)(ii)).

This five-year review has been approved by the Director of the Superfund Division, U.S. EPA Region 6. Although CERCLA Section 121(c) authorizes "the President" to undertake five year reviews, the President's authority was delegated to the Administrator of the EPA by Executive Order 12580 (52 Fed. Reg. 2926, January 29, 1987), and this authority was further delegated to the EPA's Regional Administrators on September 13, 1987, by EPA Delegation No. 14-8-A. Finally, the authority was delegated to the Director of the Superfund Division by EPA Region 6 Delegation No. R6-14-8-A on August 4, 1995.

This is the first five-year review for the Site. This review is required because hazardous substances remain in the repository (i.e., the capped area) at the Site at concentration levels above levels that allow for unlimited use of the repository and unlimited exposure to subsurface repository areas.

2. Site Chronology

A chronology of significant Site events and dates are included in Table 1. Attachment 1 lists all of the documents that were reviewed for the compilation of this report.

Table 1
Chronology of Site Events

Date	Event
7/01/81	Initial discovery of the problem
6/24/88	Proposed inclusion in NPL
3/31/89	Officially listed in NPL
8/85	NMED conducted Site Inspection (SI)
1/86	EPA conducted a Resource Conservation and Recovery Act (RCRA) Compliance Monitoring Inspection
10/86	NMED conducted CERCLA Site Inspection follow-up (SIF)
10/90	NMED/EPA initiate in-house RI/FS phase II
9/91	NMED/EPA began comprehensive RI Phase II
9/29/92	ROD signed
5/94	Construction of remedy begins
4/95	Remediation construction completed
4/96	Annual groundwater sampling program initiated
12/96	Deletion from NPL

3. Background

The Site is located one-half mile northwest of Lemitar and approximately eight miles north of Socorro in Socorro County, New Mexico, as shown in Figure 1. The Site is bounded on the east by a frontage road for US Interstate 25. The Interstate is located approximately 250 feet east of the Site. Land in the area is used primarily for agriculture or as residential property.

The Site is a former battery breaking and recycling facility. The Site includes approximately 44 acres, of which 12.5 acres are fenced. Historical Site operations were located within the fenced area. Layout of the Cal West facility is shown in Figure 2. The Site consisted of two evaporation ponds,

three facility buildings, earthen berms, soil and battery waste piles, a concrete surface pad, and a salvage area (EPA, 1992).

The Site operated as a cotton gin prior to becoming a battery recycling operation. The specific dates that the cotton gin operated are unknown, but New Mexico State Highway Department aerial photographs indicate it was active between 1961 and 1972 (EPA, 1992).

Cal West Metals operated as a small-scale battery recycling facility and secondary lead smelter at the Site. Cal West Metals, including the Site property, was owned by Albert and James LaPoint. From 1979 to 1981, the Site facility processed an estimated 20,000 automobile batteries to recover lead, plastics, and hard rubber components for commercial sale. Lead acid batteries were crushed on-site, and the batteries were separated into plastics, hard rubber, and lead oxides. The plastics, hard rubber, and lead fractions were separated by flotation and centrifugation in a rotating separator drum. Water was recycled through the separator drum and ultimately discharged to the lined pond along with waste discharges (Figure 2). Whenever the discharge line became plugged, sludges were disposed of on the concrete surface pad adjacent to the cotton gin building. Piles of crushed battery components, in various stages of separation were stored outdoors from the start of operations until approximately 1989 (EPA, 1992).

The LaPoints declared bankruptcy in 1985 and the property was foreclosed upon by the Small Business Administration (SBA). The SBA owned the property until the fall of 1997 when the City of Socorro bought the property. The Site was vacant from approximately 1990 to 1998. The metal warehouse on the south end of the Site is currently being leased by Ezell Aluminum Fabrication to build truck aluminum tool boxes and gasoline tanks. This company cuts and bends aluminum sheets and then welds them into a combination tool box/gasoline tank accessory for truck beds. The City of Socorro may use the Site as a waste transfer station in the future.

The Site has been the subject of numerous State and Federal investigations and regulatory actions since 1979 (EPA, 1992). From 1979 to 1985, the State conducted investigations to assess air and groundwater quality. Preliminary investigations were conducted by the NMED, the EPA and the LaPoints from 1981 through 1989 (EPA, 1992). Based on site investigations conducted by EPA and NMED, the Site was proposed for inclusion on the CERCLA National Priorities list (NPL) on June 24, 1988, and officially listed on March 31, 1989 (EPA, 1996).

The NMED conducted a CERCLA Site Inspection (SI) during August 1985 to characterize on-site wastes. This investigation showed elevated levels of lead in the soil and sediment (NMED, 1985). Surface soils and drainages adjacent to the Cal West Site were sampled during a CERCLA Site Inspection follow-up (SIF) performed by NMED during October 1986 (NMED, 1986). The Remedial Investigation/Feasibility Study (Phase I) was conducted in October 1990 to determine if there were contaminants other than metal constituents on the Site (NMED, 1990). The Remedial Investigation (RI) Phase II was conducted in September 1991 to fully characterize the Site and to determine the extent of contamination (NMED, 1992). The primary contaminants of concern affecting the battery waste pile, soil, sediment, and debris are metals, including primarily lead and

arsenic, and polyaromatic hydrocarbons (PAHs). Lead concentrations in sediments were detected up to 211,000 parts per million (ppm) (NMED, 1992). The NMED and the EPA determined that groundwater contamination associated with a release from the Site had not occurred. The EPA and the NMED found that background samples of groundwater at the Site were very turbid, containing particles of clay suspended in the water column. Since background soil samples contained 10-15 ppm of lead, the EPA and NMED attributed the lead in these background samples to naturally occurring clay soil particles suspended in the groundwater. When EPA and NMED collected filtered groundwater samples, they found that the lead concentrations did not exceed the Maximum Contaminant Level (MCL) established for lead under the Clean Water Act. The filtered groundwater samples are more indicative of representative groundwater conditions at the Site. The high turbidity levels of the unfiltered groundwater samples do show that there is a fairly high clay content in the geological formation where the monitoring wells are completed. Once the groundwater samples are filtered in this manner, both background and Site groundwater samples met the MCL requirement. Site monitoring wells CWMW-1, -3, and -9 were used to conduct the tests whereby EPA and NMED determined that Site groundwater was uncontaminated by the release of lead at the Site. Background monitoring wells, up-gradient of the waste piles have similar lead concentrations to those wells located down-gradient of the wastes; accordingly, EPA has determined that the wastes have had no impact on groundwater.

The selected remedy targets the cleanup to reach certain contaminant concentration levels, known as remediation goals in the contaminated media at the Site. The contaminated Site media are soil and sediment. Chemical-specific soil and sediment cleanup remediation goals were established based on concentrations that are associated with acceptable risk ranges under health-based criteria. Both carcinogenic risks and risks due to systemic toxicants were considered. Table 2 lists the chemical-specific soil and sediment remediation goals.

Chemical Concern	Remediation Goal
Arsenic	0.37 mg/Kg
Antimony	110 mg/Kg
Cadmium	140 mg/Kg
Lead	640 mg/Kg
Mercury	82 mg/Kg
Total PAHs	3 mg/Kg benzo(a)pyrene equivalents

The Record of Decision (ROD) for the Cal West Metals Site was signed on September 29, 1992. Remedial actions took place between May 1994 and April 1995. The contaminated materials with

lead concentrations exceeding 640 mg/Kg were stabilized to meet the RCRA TCLP standard of 5 milligrams per kilogram (mg/Kg) leachable lead prior to on-site disposal. The Site was deleted from the NPL in December 1996.

4. Remedial Actions

The remedial action completed at the Cal West Metals Site included on-site stabilization of lead-contaminated soil and sediment, on-site disposal of the stabilized material, and capping of the disposal area. Included in this section is a description of the remedy selection process employed at the Site, the implementation of the remedy, the operations/O&M, and the progress made at the Site since initiation of remedial action/construction completion.

4.1 Remedy Selection

The remedial action objectives were to:

- Prevent direct contact with or ingestion of contaminated soils and groundwater;
- Eliminate contaminant loading to the groundwater;
- Prevent migration of contaminants via groundwater;

The EPA, with NMED concurrence, selected on-site stabilization, on-site disposal, and capping as the most appropriate and protective remedy for this site. The remedial action involved approximately 15,000 cubic yard of contaminated soils, sediments, and source waste materials (i.e., contaminated battery casings) with lead concentrations exceeding the health-based cleanup levels of 640 mg/Kg. These contaminated materials were stabilized and solidified with cement and disposed of in an on-site excavation. The disposal (repository) area was capped and covered with at least 12 inches of clean site soils. During the Site inspection on July 31, 2000, the NMED noted that approximately 18 inches of top soil covered the cap at the two test pits that were excavated to determine the integrity of the repository cap.

4.2 Remedy Implementation

The remedial design for the Site was started on May 10, 1994, and completed by Eagle Environmental Service, Inc., a subcontractor of the U. S. Bureau of Reclamation (BOR), in April 1995. A description of the selected remedy is:

- Excavation and stabilization/solidification to meet the health-based cleanup level for lead of 640 mg/Kg of approximately 15,000 cubic yards of contaminated soils, sediments, and source waste materials;

- Disposal of the stabilized contaminated material in an on-site excavation, and capping of the disposal area with cement and a 12-inch soil cover; and

- Monitoring of Site groundwater with existing wells down-gradient of the disposal area.

Contaminated material was mixed with cement and water and was then deposited in an on-site repository cell. A total of 49,723 tons of material was stabilized: 1,028 tons of battery parts, 212 tons of sediment, and 48,483 tons of contaminated soil. The repository cell was covered with a three-inch-thick concrete cap. The concrete cap had an average comprehensive strength of 4,317 pounds per square inch (psi). The disposal area was covered with a minimum of 12 inches of clean site soils.

4.3 System Operations/O&M

Operation and Maintenance (O&M) activities are performed to protect the integrity of the remedy at the Site. Pursuant to 40 CFR § 300.510, the NMED has assumed all responsibility for O&M at the site. In accordance with the Superfund State Contract (SSC), beginning one year after the completion of the remedy, NMED sampled four Site groundwater wells annually for the first five years. Thereafter, the wells will be sampled once every five years for 25 years.

In 1997, the NMED wrote an O&M Manual for the Site (NMED, 1997). The first year of annual sampling and water level measurements took place in 1996 and included all nine wells on-site to create a baseline for groundwater. Table 3 summarizes the construction details and water level data for the nine monitoring wells located at the Site. The current groundwater flow direction is toward the south-southwest (Figure 2). This flow direction is not toward the Rio Grande, which is located to the east of the site. Local geologic faulting and nearby pumping are influencing the groundwater flow direction at the site. The gradient has remained very flat over the five-year monitoring period, as shown by plotting the water levels over time (hydrograph) (Figure 3). Potentiometric contour maps of the static water levels are shown on Figure 4 and Figure 5.

The ROD required that four existing monitoring wells be sampled to verify that the remedy was protective. NMED selected CWMW-6, -7, -8, and -9 as the wells that would be part of the groundwater monitoring program (Figure 2). Monitoring well CWMW-6 was selected to represent the up-gradient groundwater data over time. CWMW-7 was selected to monitor groundwater beneath the former battery pile and sludge pond. Groundwater samples from CWMW-8 are intended to provide information as to whether contamination has migrated off-site in the event that the groundwater flow direction should change to flow toward the Rio Grande. CWMW-9, located down-gradient of the southeast corner of the repository cell, should provide verification that the stabilization/on-site disposal remedy effectively stopped the contamination from leaching.

The four monitoring wells mentioned above were sampled yearly for four years until April 2000. In April 2000, NMED opted to sample CWMW-3 instead of CWMW-8 because groundwater flow direction indicated that CWMW-3 would be more likely to intercept down-gradient flow from the

former site activities and repository cell.

Table 3 Well Completion and Water Level Data

Well ID	Borehole Depth (ft bgs)	Well Depth (ft bgs)	Screened Interval	Casing Diameter (in)	Top of Casing Elevation (ft amsl)	Measured Date	Depth to Water (ft bgs)	Water Table Elevation (ft amsl)
CWMW-1	100	100	80-100	2	4711.9	Oct-96	95.02	4616.88
CWMW-2	80	80	75-80	2	4688.8	Oct-96	71.41	4616.79
CWMW-3	95	95	90-95	2	4702.37	Oct-96	85.58	4616.79
						Apr-00	86.13	4616.24
CWMW-4	93	81	66-81	2	4688.69	Oct-96	71.26	4617.43
CWMW-5	103	94	79-94	2	4700.63	Oct-96	83.42	4617.21
CWMW-6	98	91	76-91	2	4697.67	Oct-96	80.43	4617.24
						Apr-97	81.16	4616.51
						Apr-98	80.93	4616.74
						Apr-99	80.9	4616.77
						Apr-00	81.07	4616.6
CWMW-7	108	99	79-99	2	4703.78	Oct-96	86.71	4617.07
						Apr-97	87.39	4616.39
						Apr-98	87.16	4616.62
						Apr-99	87.15	4616.63
						Apr-00	87.3	4616.48
CWMW-8	103	97	77-92	2	4699.13	Oct-96	82.06	4617.07
						Apr-97	82.8	4616.33
						Apr-98	82.52	4616.61
						Apr-99	82.51	4616.62
CWMW-9	121	108	88-103	2	4716.21	Oct-96	99.48	4616.73
						Apr-97	100.02	4616.01
						Apr-98	99.85	4616.36
						Apr-99	99.88	4616.33
						Apr-00	99.99	4616.22

Field sampling procedures followed those outlined in NMED's Standard Operating Procedures (SOP) document and in the O&M manual for the site. Strict health and safety measures were followed throughout the field program. Prior to purging, the static water level of the well being sampled was measured with a decontaminated water level probe. A minimum of three well casing volumes were purged from the well being sampled prior to sample collection using dedicated polyvinylchloride (PVC) bailers. Samples were collected and preserved with nitric acid. Samples collected for dissolved metal analysis were filtered with a .45 micron filter prior to preservation. NMED delivered the samples to the New Mexico Scientific Laboratory for analysis of 14 total and dissolved metals. Groundwater sampling results are discussed in Section 5.4.

Table 4 provides a summary of the annual O&M costs recorded to-date for the Site. The costs for 1996 are higher than for subsequent years because all nine monitoring wells were sampled that year, rather than just four of the wells as required by the ROD. In addition, a second site visit and water level measurement event was conducted in fall of 1996 when a new NMED project manager was assigned to the site. In general, the actual O&M costs (average $4,280 per year) are less than the estimated annual O&M cost (estimated $5,000 per year) but fall within the acceptable range of + 50 to -30 percent of the ROD estimate.

Table 4
Annual O&M Costs

Dates		Total Cost rounded to nearest $100
From	To	
1/96	12/96	$6,800
1/97	12/97	$3,800
1/98	12/98	$3,500
1/99	12/99	$3,800
1/00	9/00	$3,500

5. Five-Year Review Process

This five-year review has been conducted in accordance with EPA's current guidance, as well as the *Comprehensive Five-Year Review Guidance*, Draft, dated October 1999 (EPA, 1999). Interviews were conducted with relevant parties, a site inspection was conducted, and applicable data and documentation covering the period of the review was evaluated. The findings of the review are described in the following section.

6. Five-Year Review Findings

The information collected during the interviews, the site inspection, the standards review, and the data review are described in the following subsections.

6.1 Interviews

NMED conducted interviews in Lemitar and Socorro on July 31, 2000. A telephone interview was conducted on August 4, 2000. Interview Record Forms, which document the issues discussed during these interviews, are provided in Attachment 2.

The following individuals were interviewed in person on July 31, 2000, as part of the five-year review:

- Glen Allen Ezell, President of Ezell Aluminum Fabrication (On-site operator)
- Richard Sanchez, Superintendent of Socorro Waste Water Treatment Plant
- Jay Santianes (City of Socorro Water Systems Superintendent) and Patrick Salome (City of Socorro Clerk)
- James S. Green, Citizen

Hector Leon, the nearest neighbor, was interviewed by telephone on August 4, 2000.

Mr. Ezell, who works on-site, was aware of previous site use. He noted that he believed that the cleanup was "*a waste of time*." Mr. Ezell mentioned that the City of Socorro (the "City") had not mentioned restrictions on the use of property. He had hired a subcontractor to bring a gas line into a building located on the Site and the subcontractor had accidently dug into the western edge of the repository cell. The gas line trenching had to be diverted around the northern edge of the cell. A local water association provides the facility with water, at Mr. Ezell's request. However, Mr. Ezell does not utilize the water for drinking purposes because the water has a strange smell and taste. The water also stains the bathroom sink and toilets. Mr. Ezell stated that he believes the problem is inside the building and the associated piping. He says the piping needs to be flushed.

Mr. Sanchez, City of Socorro Waste Water Treatment Plant (WWTP) Production Superintendent, stated that he was aware that the remediation of the site involved "*nasty metals*." He noted that Jay Santianes would have more information on the site. Mr. Sanchez noted that the supply well on site should be used for landscaping.

Mr. Salome and Mr. Santianes, City Clerk and Water Systems Superintendent, respectively, stated that they knew the property has a clean bill of health. Mr. Salome stated the property has a high community interest and has been inquired about for purchase more than any other property the City owns. Mr. Salome noted that he is aware of the property restrictions for the Site and that required records are kept in-house with the City. Mr. Santianes said the City sends people out to the site

periodically to check on the buildings. Mr. Salome stated that the City is still planning on auctioning the scrap metal at the site. Mr. Santianes was informed of the problem Mr. Ezell was having with the water quality at the facility. Mr. Santiannes was going to send someone out to check the water and also to fix the fence, the well house door, and the exposed supply well (CWSW-2; Figure 2).

Mr. Green, a local citizen, noted that he believed there were other sites in the community, that are far more contaminated than the Site, that need attention. Mr. Green stated that he is unaware of any community concerns pertaining to the Site. Mr. Green said that the community does not like the idea of utilizing the facility as a waste transfer station; however, Mr. Green has no problem with the plan.

Mr. Leon, the nearest neighbor, stated that he was impressed with the timeliness of the Site remediation. He was not aware of any impacts the site had on the surrounding community. He also stated that he didn't know where to obtain information about the site.

6.2 Site Inspection

A site inspection was conducted by NMED staff on July 31, 2000. The site inspection checklist is provided in Attachment 3 along with NMED field log book entries. Photographs taken during the site visit are provided in Attachment 4.

During the site inspection the repository cell and monitoring wells were inspected. The inspection evaluated the integrity of the cell, the integrity of the soil cover, the condition of site fencing, whether or not access was being restricted, the condition of the building on the Site, and the condition of the monitoring wells. The site layout is shown on Figure 2. A summary of inspection findings are presented below.

Conditions during the inspection were hot with a temperatures at 95° Fahrenheit, sunny and no precipitation. The site vegetation in previously disturbed areas was found to have stabilized, and it was found to be comparable to vegetation in areas surrounding the Site (Photo #1).

NMED dug two test pits (A and B) to determine the integrity of the repository cell. It was noted that the soil was extremely compacted and after digging approximately 14 to 18 inches, the cement cell cover was encountered (Photos 2 and 3). During the annual sampling event of April 2000, it was noted that a backhoe attempted to dig through the cell cover on the western edge of the cell boundary (Photo 4); however, test pit "A" showed no evidence of damage to the cell cover. It was also noted during the April 2000 sampling event that there was alkali buildup on the southeastern portion of the cell soil cover; however, during the July 2000 site inspection the alkali buildup was not present (Photo #5). There were no visible erosion or ponding areas on the repository cell.

There are six steel fencing posts (Photo #6) marking the boundaries of the repository cell. However, there are no warning signs present to ward off any further penetrations of the repository cell, and the fence posts are not clearly visible. From a distance, the fence posts are almost invisible.

It was noted that the fence on the southeast corner of the site was damaged (Photo #7). No vandalism was evident; however, the lock is missing from the CWMW-3 monitoring well. It was noted that the only sign posted to warn trespassers was on the south end of the fenced portion of the property. The sign states "Warning: Authorized Personnel Only." The warning sign has faded due to its exposure to the elements; moreover, the sign is in a spot that makes it inconspicuous.

The condition of the monitoring wells was also inspected during the site inspection visit (Figure 2). Monitoring wells CWMW-6, -7, -8, and -9 were recently sampled and are in good condition.

CWMW-2 is locked, but has a different lock than the other monitoring wells. CWMW-3 has a missing lock and also requires a cap. CWMW-4 is locked and appears to be in good condition. CWMW-5 appears to be in good condition although the pad is cracked and the side bar is bent inward. CWMW-5 is locked and has a dedicated bailer. CWSW-1 is a former pump house and supply well. The well house has fallen off its foundation; consequently, a concrete slab with a 3-inch PVC pipe, a 2-inch black hose, and a spigot is exposed. The production well that is situated on southeast corner of the site (CWSW-2) is not secure because the door to the well house is off its hinges, and there is an open hole in the floor where the well is located.

Metal salvage and scrap metal is precariously piled on the concrete slab next to the northern storage warehouse (Photo #8). The north side of the north storage warehouse is in disrepair with corrugated metal roofing being stripped away by the wind. There was also evidence of animal burrows in the north storage warehouse (Photo # 9).

6.3 Standards Review

Applicable or Relevant and Appropriate Requirements (ARARs) for this site were identified in the ROD dated September 1992 (EPA, 1992). This Five-Year Review included identification of and evaluation of changes in these ARARs to determine whether such changes may affect the protectiveness of the selected remedy. It was found that there were no changes in any ARARs since the ROD was issued.

6.4 Data Review

The data reviewed for the development of this five-year review are listed in Attachment 1 and include the 1985 CERCLA Site Inspection, the 1986 Site Inspection Follow-up, the 1990 Remedial Investigation/Feasibility Study Phase I, the 1991 Remedial Investigation/Feasibility Study Phase II, the 1992 ROD, the 1995 Preliminary Closeout Report, the 1996 Final Closeout Report, the 1996 O&M Manual, the Scientific Laboratory Division (SLD) analytical results forms, and the NMED field logbook notes.

The groundwater data from the annual sampling events was reviewed. The results are provided in Table 5 and discussed below.

In the groundwater samples collected during the five-year period, the following metals were detected at concentrations above regulatory standards: aluminum, antimony, arsenic, barium, chromium, cobalt, iron, lead, and manganese. The exceedances occurred in total metal analysis, but not in dissolved metal samples, except as noted below.

Aluminum, in total suspended form, exceeded the EPA maximum contaminant level (MCL), but not State standards, in every well for all five yearly sampling events. However, dissolved-phase aluminum exceeded the MCL in only two wells during 1996 (Table 5). Concentrations do not show any trends.

Antimony, in total suspended form, exceeded the Federal MCL in the 1996 sample collected from CWMW-9. It has not been detected above regulatory standards since then.

In April 1996, arsenic was detected in one well (CWMW-9) at concentrations above regulatory standards. No subsequent samples contained arsenic above allowable concentrations.

Barium levels, in unfiltered samples, exceeded both State and EPA levels in four of the five sampling events. The concentrations exceeded regulatory standards in all wells sampled in April 1996, in two samples collected in April 1997, and in one well sample in April 1998 and April 1999. The total-metals barium concentrations do not show any significant trends. No dissolved-phase barium concentrations exceeded regulatory standards.

Chromium total metal levels were exceeded in two monitoring wells in April 1996. These levels exceeded both State and Federal MCLs. No subsequent samples contained chromium above acceptable limits.

Cobalt, in total suspended form, exceeded the State standard in the 1996 sample collected from CWMW-7. No subsequent samples contained cobalt above acceptable limits.

Iron, in total suspended form, exceeded both State and Federal MCLs in all sampling events during the five-year sampling period. All wells sampled as part of the Operation and Maintenance (O&M) contained total iron concentrations above regulatory standards. No contaminant trends in iron levels were observed.

Table 5
Cal West Metals Groundwater Analytical Data

Location:
CWMW-3

Compound	NM GW Standard (mg/L)	EPA MCL (mg/L)	April 2000 CWMW-3 (mg/L)	Data Qualifier	April 2005 CWMW-3 (mg/L)	Data Qualifier	April 2010 CWMW-3 (mg/L)	Data Qualifier	April 2015 CWMW-3 (mg/L)	Data Qualifer	April 2020 CWMW-3 (mg/L)	Data Qualifer
Dissolved Metals:												
Aluminum	*5.0*	*0.05-0.2*	<0.01									
Antimony		*0.006*	<0.001									
Arsenic	*0.1*	*0.05*	0.006									
Barium	*1.0*	*2.0*	<0.1									
Beryllium		*0.004*	na									
Boron	*0.75(i)*		na									
Cadmium	*0.01*	*0.005*	<0.001									
Calcium			na									
Chromium	*0.05*	*0.1*	na									
Cobalt	*0.05*		na									
Copper		*1.3*	<0.01									
Iron	*1.0*	*0.3*	<0.05									
Lead	*0.05*	*0.015*	<0.001									
Magnesium			na									
Manganese	*0.2*	*0.05*	<0.001									
Mercury	*0.002*	*0.002*	<0.0002									
Molybdenum	*1.0(i)*		na									
Nickel	*0.2(i)*	*0.1*	<0.01									
Potassium			na									
Selenium	*0.05*	*0.05*	<0.005									
Silicon			na									
Silver	*0.05*	*0.05*	<0.001									
Sodium			na									
Strontium			na									
Thallium		*0.002*	na									
Tin			na									
Vanadium			na									
Zinc	*10.0*	*5.0*	<0.01									
CWMW-3 Total Metals:												
Aluminum	*5.0*	*0.05-0.2*	1.4									
Antimony		*0.006*	<0.001									
Arsenic	*0.1*	*0.05*	0.007									
Barium	*1.0*	*2.0*	0.5									
Beryllium		*0.004*	na									
Boron	*0.75(i)*		na									
Cadmium	*0.01*	*0.005*	<0.005	F								
Calcium			na									
Chromium	*0.05*	*0.1*	na									
Cobalt	*0.05*		na									
Copper		*1.3*	<0.01									
Iron	*1.0*	*0.3*	2									
Lead	*0.05*	*0.015*	0.009									
Magnesium			na									
Manganese	*0.2*	*0.05*	0.027									
Mercury	*0.002*	*0.002*	<0.0002									
Molybdenum	*1.0(i)*		na									
Nickel	*0.2(i)*	*0.1*	<0.01									
Potassium			na									
Selenium	*0.05*	*0.05*	<0.005	D, F								
Silicon			na									
Silver	*0.05*	*0.05*	<0.001									
Sodium			na									
Strontium			na									
Thallium		*0.002*	na									
Tin			na									
Vanadium			na									
Zinc	*10.0*	*5.0*	0.02									

note: CWMW-3 only sampled in 2000

Table 5

Cal West Metals Groundwater Analytical Data

Location:

CWMW-6

Compound	NM GW Standard (mg/L)	EPA MCL (mg/L)	April 1996 CWMW-6 (mg/L)	Data Qualifier	April 1997 CWMW-6 (mg/L)	Data Qualifier	April 1998 CWMW-6 (mg/L)	Data Qualifier	April 1999 CWMW-6 (mg/L)	Data Qualifier	April 2000 CWMW-6 (mg/L)	Data Qualifier	April 2000 Duplicate (mg/L)	Data Qualifier
Dissolved Metals:														
Aluminum	*5.0*	*0.05-0.2*	0.0242	B	<0.010		<0.1	D, F	<0.01	C, H	<0.02		ns	
Antimony		*0.006*	<0.0124	U	<0.001		<0.001		0.002	H	<0.002		ns	
Arsenic	*0.1*	*0.05*	0.0075	B	<0.005	C	<0.005	C	<0.005	C	<0.002		ns	
Barium	*1.0*	*2.0*	0.053	B	<0.1		<0.1	C	<0.1	C, H	<0.2		ns	
Beryllium		*0.004*	<0.0006	U	*na*		<0.05	C	*na*		*na*		*ns*	
Boron	*0.75(i)*		na		na		0.2	C	na		na		ns	
Cadmium	*0.01*	*0.005*	<0.0009	U	<0.001		<0.1	C	<0.001	C, H	<0.002		ns	
Calcium			176	E	na		210	C	na		na		ns	
Chromium	*0.05*	*0.1*	<0.0049	U	na		<0.1	C	na		na		ns	
Cobalt	*0.05*		<0.0018	U	na		<0.05	C	na		na		ns	
Copper		*1.3*	<0.0047	U	<0.010		<0.1	C	<0.01	C, H	<0.02		ns	
Iron	*1.0*	*0.3*	0.0464	B	<0.050		<0.1	C	<0.05	C	<0.05		ns	
Lead	*0.05*	*0.015*	0.0015	B	<0.001		<0.001		<0.001	C, H	<0.002		ns	
Magnesium			24.2		na		28		na		na		ns	
Manganese	*0.2*	*0.05*	0.0018	B	<0.001		<0.05	C	<0.001	C, H	<0.002		ns	
Mercury	*0.002*	*0.002*	<0.0001	U	<0.0002		<0.0002		na		<0.0002		ns	
Molybdenum	*1.0(i)*		na		na		<1.0	C	na		na		ns	
Nickel	*0.2(i)*	*0.1*	<0.0037	U	<0.010		<0.1	C	<0.01	C, H	<0.02		ns	
Potassium			5.750	E	*na*		*na*		*na*		*na*		*ns*	
Selenium	*0.05*	*0.05*	0.011		0.008		0.01	C	0.008	C	0.009	D, F	ns	
Silicon			na		na		13	C	na		na		ns	
Silver	*0.05*	*0.05*	<0.0034	U	<0.001		<0.1	C	<0.001	C, H	<0.002		ns	
Sodium			130	E	na		na		na		na		ns	
Strontium			na		na		1.5	C	na		na		ns	
Thallium		*0.002*	<0.0033	U	na		na		na		na		ns	
Tin			na		na		<0.1	C	na		na		ns	
Vanadium			0.0035	B	na		<0.1	C	na		na		ns	
Zinc	*10.0*	*5.0*	0.0282		0.05		<0.1	C	0.03		<0.02		ns	
CWMW-6 Total Metals:														
Aluminum	*5.0*	*0.05-0.2*	14.4	N, A	3.9	C	1.7		ns		2.5		1.3	
Antimony		*0.006*	<0.0177	U, N	<0.001		<0.001		ns		<0.002		<0.002	
Arsenic	*0.1*	*0.05*	0.0126	N	0.008	C	0.001		ns		<0.005		<0.005	
Barium	*1.0*	*2.0*	3.27	NA	0.7		0.5		*ns*		0.4		0.4	
Beryllium		*0.004*	0.00061	B	na		<0.05		ns		na		na	
Boron	*0.75(i)*		na		na		0.3		ns		na		na	
Cadmium	*0.01*	*0.005*	<0.0015	U	<0.001		<0.1		ns		<0.002		<0.002	
Calcium			216	N, A	na		180		ns		na		na	
Chromium	*0.05*	*0.1*	0.0282	N, A	na		<0.1		ns		na		na	
Cobalt	*0.05*		0.0122	B	na		<0.05		ns		na		na	
Copper		*1.3*	0.0235	B	0.01		<0.1		ns		<0.02		<0.02	
Iron	*1.0*	*0.3*	14.4	N, A	4.5		1.7		ns		3.4		2	
Lead	*0.05*	*0.015*	0.0326	N, E	0.013		<0.005		ns		0.021		0.026	
Magnesium			28.3	N, A	na		27		ns		na		na	
Manganese	*0.2*	*0.05*	0.308	N, A	0.076		<0.05		ns		0.075		0.041	
Mercury	*0.002*	*0.002*	<0.0001	U	<0.0002		<0.0002		ns		<0.0002		<0.0002	
Molybdenum	*1.0(i)*		na		na		<0.1		ns		na		na	
Nickel	*0.2(i)*	*0.1*	0.0153	B	0.01		<0.1		*ns*		<0.02		<0.02	
Potassium			8.94	U	na				ns		na		na	
Selenium	*0.05*	*0.05*	0.0124	N	0.008	D	0.009	C	ns		0.02	D, F	0.01	C
Silicon			na		na		14		ns		na		na	
Silver	*0.05*	*0.05*	<0.0033	U	<0.001		<0.1		ns		<0.002		<0.002	
Sodium			142	N, A	na				ns		na		na	
Strontium			na		na		1.5		ns		na		na	
Thallium		*0.002*	<0.0033	U	na				ns		na		na	
Tin			na		na		<0.1		ns		na		na	
Vanadium			0.0278	B	na		<0.1		ns		na		na	
Zinc	*10.0*	*5.0*	0.461	N, A	0.21		<0.1		ns		0.18		0.23	

Table 5
Cal West Metals Groundwater Analytical Data

Location:
CWMW-7

Compound	NM GW Standard mg/L	EPA MCL mg/L	April 1996 CWMW-7 mg/L	Data Qualifier	April 1997 CWMW-7 mg/L	Data Qualifier	April 1997 Duplicate mg/L	Data Qualifier	April 1998 CWMW-7 mg/L	Data Qualifier	April 1999 CWMW-7 mg/L	Data Qualifier	April 2000 CWMW-7 mg/L	Data Qualifier
Dissolved Metals:														
Aluminum	*5.0*	*0.05-0.2*	0.427	N, A	<0.01		<0.01		<0.1	C, H	<0.01	C, H	<0.01	
Antimony		*0.006*	<0.0124	U	<0.001		<0.001		<0.001		0.003	H	<0.001	
Arsenic	*0.1*	*0.05*	0.0103	N, A	0.006	C	0.006	C	<0.005	C, H	<0.001	H	0.005	C, H
Barium	*1.0*	*2.0*	0.0479	B	<0.1		<0.1		<0.1	C, H	<0.1	C, H	<0.1	
Beryllium		*0.004*	<0.0006	U	na		na		<0.05	C, H	na		na	
Boron	*0.75(i)*		na		na		na		0.4	C, H	na		na	
Cadmium	*0.01*	*0.005*	<0.0009	U	<0.001		<0.001		<0.1	C, H	<0.001	C, H	<0.001	
Calcium			231	E	na		na		270	C	na		na	
Chromium	*0.05*	*0.1*	<0.0049	U	na		na		<0.1	C, H	na		na	
Cobalt	*0.05*		<0.0018	U	na		na		<0.05	C, H	na		na	
Copper		*1.3*	0.0074	B	<0.01		<0.01		<0.1	C, H	<0.01	C, H	<0.01	
Iron	*1.0*	*0.3*	0.0377	B	<0.05		<0.05		<0.1	C	<0.1	C	<0.05	
Lead	*0.05*	*0.015*	0.0025	B	<0.001		<0.001		<0.001		<0.001	C H	<0.001	
Magnesium			33.9	N, A	na		na		41		na		na	
Manganese	*0.2*	*0.05*	0.021	N, A	<0.001		<0.001		<0.05	C, H	<0.001	C, H	0.001	
Mercury	*0.002*	*0.002*	<0.0001	U	<0.0002		<0.0002		<0.0002	C, H	na		<0.0002	
Molybdenum	*1.0(i)*		na		na		na		0.002	C, H	na		na	
Nickel	*0.2(i)*	*0.1*	<0.0037	U	<0.01		<0.01		<0.1	C, H	<0.01	C, H	<0.01	
Potassium			6.17	E	na		na		na		na		na	
Selenium	*0.05*	*0.05*	0.0302	N, A	0.018		0.019		0.02	C	0.014	C, H	0.019	C, H
Silicon			na		na		na		15	C, H	na		na	
Silver	*0.05*	*0.05*	<0.0034	U	<0.001		<0.001		<0.001		<0.001	C, H	<0.001	
Sodium			156	E	na		na		na		na		na	
Strontium			na		na		na		1.5	H	na		na	
Thallium		*0.002*	<0.0033	U	na		na		na		na		na	
Tin			na		na		na		<0.1	H	na		na	
Vanadium			0.0069	B	na		na		<0.1	C, H	na		na	
Zinc	*10.0*	*5.0*	0.0232	N, A	0.02		<0.01		<0.1	C, H	0.01	C, H	0.01	
CWMW-7 Total Metals:														
Aluminum	*5.0*	*0.05-0.2*	75	N, A	9.6	H	12	H	22		28	C	4	
Antimony		*0.006*	<0.0177	U, N	<0.001		<0.001		<0.001		<0.001		<0.001	C
Arsenic	*0.1*	*0.05*	0.0625	N	<0.001		0.012	C, H	0.022		0.016	C	<0.002	
Barium	*1.0*	*2.0*	11.5	N, A	2		0.8		0.3		2.8	G	0.9	
Beryllium		*0.004*	0.0036	B	na		na		<0.05		na		na	
Boron	*0.75(i)*		na		na		na		0.5		na		na	
Cadmium	*0.01*	*0.005*	0.0024	B	<0.001		<0.001		<0.1		<0.001		<0.002	
Calcium			309	N, A	na		na		290		na		na	
Chromium	*0.05*	*0.1*	0.159	N, A	na		na		<0.1		na		na	
Cobalt	*0.05*		0.0572	N, A	na		na		<0.05		na		na	
Copper		*1.3*	0.223	N, A	0.02		0.03		<0.1		0.06		0.01	C
Iron	*1.0*	*0.3*	99.7	N, A	12	C,H	17	C	31	C	37		5.4	
Lead	*0.05*	*0.015*	0.233	N, E	0.041		0.041		0.009		0.092		0.014	C
Magnesium			52.4	N, A	na		na		46		na		na	
Manganese	*0.2*	*0.05*	2.19	N, A	0.22		0.34	C, H	0.99		0.71		0.11	
Mercury	*0.002*	*0.002*	0.00031	N, A	<0.0002		<0.0002		<0.0002		<0.0002		<0.0002	
Molybdenum	*1.0(i)*		na		na		na		<0.1		na		na	
Nickel	*0.2(i)*	*0.1*	0.0994	N, A	0.02		0.019		<0.1		0.03		0.01	C
Potassium			16.5	N, A	na		na				na		na	
Selenium	*0.05*	*0.05*	0.0257	N	0.02	D,F,H	0.02	D,H,F	0.018	D, F	0.02	D, F	0.03	D, F
Silicon			na		na		na		52		na		na	
Silver	*0.05*	*0.05*	<0.0033	U	<0.001		<0.001		0.1		<0.001		<0.001	C
Sodium			167	N, A	na		na				na		na	
Strontium			na		na		na		1.4		na		na	
Thallium		*0.002*	<0.0033	U	na		na				na		na	
Tin			na		na		na		<0.1		na		na	
Vanadium			0.152	N, A	na		na		<0.1		na		na	
Zinc	*10.0*	*5.0*	1.67	N, A	na		0.23		0.8		0.5		0.11	C

Table 5
Cal West Metals Groundwater Analytical Data

Location:
CWMW-8

Compound	NM GW Standard mg/L	EPA MCL mg/L	April 1996 CWMW-8 mg/L	Data Qualifier	April 1997 CWMW-8 mg/L	Data Qualifier	April 1998 CWMW-8 mg/L	Data Qualifier	April 1999 CWMW-8 mg/L	Data Qualifier	April 2000 CWMW-8 mg/L	Data Qualifier	April 2005 CWMW-8 mg/L	Data Qualifier
Dissolved Metals:														
Aluminum	*5.0*	*0.05-0.2*	0.0232	B	<0.01		0.2	C, H	<0.01	C, H	ns			
Antimony		*0.006*	<0.0124	U	<0.001		<0.001		<0.001	C, H	ns			
Arsenic	*0.1*	*0.05*	0.0102	N, A	0.006	C	<0.01	C	<0.005	C	ns			
Barium	*1.0*	*2.0*	0.0605	B	<0.1		<0.1	C, H	<0.1	C, H	ns			
Beryllium		*0.004*	<0.0006	U	*na*		<0.05	C, H	*na*		*ns*			
Boron	*0.75(i)*		na		na		0.3	C, H	na		ns			
Cadmium	*0.01*	*0.005*	<0.0009	U	<0.001		<0.1	C, H	<0.001	C, H	ns			
Calcium			218	E	na		260	C	na		ns			
Chromium	*0.05*	*0.1*	<0.0049	U	na		<0.1	D,F,H	na		ns			
Cobalt	*0.05*		0.0018	B	na		<0.05	C, H	na		ns			
Copper		*1.3*	<0.0047	U	<0.01		<0.1	C, H	<0.01	C, H	ns			
Iron	*1.0*	*0.3*	0.0162	B	<0.05		<0.1	H	<0.05		ns			
Lead	*0.05*	*0.015*	0.0011	B	<0.001		<0.001		<0.001	C, H	ns			
Magnesium			30.8	N, A	na		39	C, H	na		ns			
Manganese	*0.2*	*0.05*	0.0032	B	<0.001		<0.05	C, H	<0.001	C, H	ns			
Mercury	*0.002*	*0.002*	<0.0001	U	<0.0002		<0.0002		na		ns			
Molybdenum	*1.0(i)*		na		na		<1.0	C	na		ns			
Nickel	*0.2(i)*	*0.1*	0.0046	B	<0.01		<0.1	C, H	<0.01	C, H	ns			
Potassium			6.55	E	na		na		na		ns			
Selenium	*0.05*	*0.05*	0.0306	N, A	0.023		0.03	C	0.018	C	ns			
Silicon			na		na		14	D,F,H	na		ns			
Silver	*0.05*	*0.05*	<0.0034	U	<0.001		0.1	C, H	<0.001	C, H	ns			
Sodium			134	E	na		na		na		ns			
Strontium			na		na		2.1	H	na		ns			
Thallium		*0.002*	<0.0033	U	*na*		*na*		*na*		*ns*			
Tin			na		na		<0.1	H	na		ns			
Vanadium			0.0079	B	na		<0.1	C, H	na		ns			
Zinc	*10.0*	*5.0*	0.0082	B	<0.01		<0.1	C, H	<0.01	C, H	ns			
CWMW-8 Total Metals:														
Aluminum	*5.0*	*0.05-0.2*	15.7	N, A	2.3		1		3.8	H	ns			
Antimony		*0.006*	<0.0177	U, N	<0.001		<0.001		<0.001	I	ns			
Arsenic	*0.1*	*0.05*	0.0424	N	0.011	C	<0.01	C	0.002		ns			
Barium	*1.0*	*2.0*	2.3	N, A	0.5		0.2		0.6	H	ns			
Beryllium		*0.004*	<0.0005	U	na		<0.05		na		ns			
Boron	*0.75(i)*				na		0.3		na		ns			
Cadmium	*0.01*	*0.005*	<0.0015	U	<0.001		<0.1		<0.001	H	ns			
Calcium			24.5	N, A	na		260		na		ns			
Chromium	*0.05*	*0.1*	0.032	N, A	na		<0.1		na		ns			
Cobalt	*0.05*		0.0118	B	na		<0.05		na		ns			
Copper		*1.3*	0.0214	B	<0.01		<0.1		0.01	H	ns			
Iron	*1.0*	*0.3*	19.7	N, A	3.2		1.6		4.9	H	ns			
Lead	*0.05*	*0.015*	0.0497	N, E	0.009		0.01		0.008	I	ns			
Magnesium			35.3	N, A	na		42		na		ns			
Manganese	*0.2*	*0.05*	0.657	N, A	0.15		0.07		0.18	H	ns			
Mercury	*0.002*	*0.002*	0.00015	B	<0.0002		<0.0002		<0.0002		ns			
Molybdenum	*1.0(i)*				na		0.002		na		ns			
Nickel	*0.2(i)*	*0.1*	0.0187	B	0.01		<0.1		<0.01	H	ns			
Potassium			9.54	N, A	na		na		na		ns			
Selenium	*0.05*	*0.05*	0.0307	N	0.026	C	0.032	C	0.03	C	ns			
Silicon					na		17		na		ns			
Silver	*0.05*	*0.05*	0.0049	B	<0.001		<0.001		<0.001	I	ns			
Sodium			139	N, A	na		na		na		ns			
Strontium					na		2.3		na		ns			
Thallium		*0.002*	<0.0033	U	na		na		na		ns			
Tin					na		<0.1		na		ns			
Vanadium			0.0378	B	na		<0.1		na		ns			
Zinc	*10.0*	*5.0*	0.177	N, A	0.03		0.1		0.07	H	ns			

Table 5
Cal West Metals Groundwater Analytical Data

Location:
CWMW-9

Compound	NM GW Standard mg/L	EPA MCL mg/L	April 1996 CWMW-9 mg/L	Data Qualifier	April 1997 CWMW-9 mg/L	Data Qualifier	April 1998 CWMW-9 mg/L	Data Qualifier	April 1998 Duplicate mg/L	Data Qualifier	April 1999 CWMW-9 mg/L	Data Qualifier	April 1999 Duplicate mg/L	Data Qualifier	April 2000 CWMW-9 mg/L	Data Qualifier
Dissolved Metals:																
Aluminum	*5.0*	*0.05-0.2*	0.0684	B	<0.01		<0.1	H	ns		<0.01	C, H	ns		<0.01	
Antimony		*0.006*	<0.0124	U	<0.001		<0.001		ns		0.003	C, H	ns		<0.001	C, H
Arsenic	*0.1*	*0.05*	0.0092	B	0.008	C, H	0.006	C	ns		0.005	C, H	ns		0.006	
Barium	*1.0*	*2.0*	0.0794	B	<0.1		<0.1	C H	ns		<0.1	C, H	ns		<0.1	C, H
Beryllium		*0.004*	<0.0006	U	na		<0.05	C H	ns		na		ns		na	
Boron	*0.75(i)*		na		na		0.2	C, H	ns		na		ns		na	
Cadmium	*0.01*	*0.005*	<0.0009	U	<0.001		<0.1	C, H	ns		<0.001	C, H	ns		<0.001	C, H
Calcium			110	E	na		120	H	ns		na		ns		na	
Chromium	*0.05*	*0.1*	<0.0049	U	na		<0.1	C, H	ns		na		ns		na	
Cobalt	*0.05*		<0.0018	U	na		<0.05	C, H	ns		na		ns		na	
Copper		*1.3*	<0.0047	U	<0.01		<0.1	C, H	ns		<0.01	C, H	ns		<0.01	
Iron	*1.0*	*0.3*	0.0525	B	<0.05	C	<0.1	C, H	ns		<0.05		ns		<0.05	C, H
Lead	*0.05*	*0.015*	0.0012	B	<0.001		<0.001		ns		<0.001	C, H	ns		<0.001	C, H
Magnesium			19.9	N, A	na		24	H	ns		na		ns		na	
Manganese	*0.2*	*0.05*	0.0034	B	<0.001		<0.05	C, H	ns		<0.001	C, H	ns		0.002	
Mercury	*0.002*	*0.002*	<0.0001	U	<0.0002		<0.0002		ns		na		ns		<0.0002	
Molybdenum	*1.0(i)*		na		na		0.002		ns		na		ns		na	
Nickel	*0.2(i)*	*0.1*	<0.0037	U	<0.01		<0.1	C, H	ns		<0.01	C, H	ns		<0.01	
Potassium			5.05	E	na		na		ns		na		ns		na	
Selenium	*0.05*	*0.05*	0.0172	E	<0.005	D	0.009	C, H	ns		0.006	C	ns		0.008	C
Silicon			na		na		15	C, H	ns		na		ns		na	
Silver	*0.05*	*0.05*	<0.0034	U	<0.001		<0.1	C, H	ns		<0.001	C, H	ns		<0.001	C, H
Sodium			74.6	E	na		na		ns		na		ns		na	
Strontium			na		na		1.3	C, H	ns		na		ns		na	
Thallium		*0.002*	<0.0033	U	na		na		ns		na		ns		na	
Tin			na		na		<0.1	C, H	ns		na		ns		na	
Vanadium			0.0074	B	na		<0.1	H	ns		na		ns		na	
Zinc	*10.0*	*5.0*	0.011	B	0.02		<0.1	C, H	ns		<0.01	C, H	ns		0.01	
CWMW-9 Total Metals:																
Aluminum	*5.0*	*0.05-0.2*	47.5	N, A	15	C, H	5.1		4.9		2		1.9	H	3.9	
Antimony		*0.006*	0.0412	B, N	<0.001	C, H	<0.001		<0.001		<0.001		<0.001	C, H	<0.001	
Arsenic	*0.1*	*0.05*	0.0913	N	0.034	C, H	0.018		0.02		0.009		0.007	C, H	0.013	C
Barium	*1.0*	*2.0*	7.09	N, A	2.3	C, D	1		1.1	C	0.3		0.3	H	0.6	
Beryllium		*0.004*	0.0014	B	na		<0.05	C	<0.05	C	na		na		na	
Boron	*0.75(i)*		na		na		0.2	C	0.2	C	na		na		na	
Cadmium	*0.01*	*0.005*	<0.0015	U	<0.001	C, H	<0.1	C	<0.1	C	<0.001		<0.001	H	<0.002	
Calcium			140	N, A	*na*		130		120		*na*		*na*		*na*	
Chromium	*0.05*	*0.1*	0.121	N, A	na		<0.1	C	<0.1	C	na		na		na	
Cobalt	*0.05*		0.045	B	na		<0.05	C	<0.05	C	na		na		na	
Copper		*1.3*	0.0932	N, A	0.03	C, H	<0.1	C	<0.05	C	<0.01		<0.01	C, H	<0.01	
Iron	*1.0*	*0.3*	66.1	N, A	20	H	7.4		7.0		2.9		2.6	C, H	5.6	
Lead	*0.05*	*0.015*	0.0753	N, E	0.022	H	0.013		0.018		0.005		0.004	C, H	0.008	
Magnesium			31.5	N, A	na		23		23.0	C	na		na		na	
Manganese	*0.2*	*0.05*	1.64	N, A	0.58	C, H	0.25	C	0.3	C	0.08		0.074	C, H	0.16	
Mercury	*0.002*	*0.002*	0.00029	N, A	<0.0002		<0.0002		<0.0002		<0.0002		na		<0.0002	
Molybdenum	*1.0(i)*		na		na		<0.1	C	<0.1	C	na		na		na	
Nickel	*0.2(i)*	*0.1*	0.0717	N, A	0.02	C, H	<0.1	C	<0.1	C	<0.01		<0.01	C, H	<0.01	
Potassium			14.1	N, A	na		na		na		na		na		na	
Selenium	*0.05*	*0.05*	0.0181	N	<0.005	D,F,H	0.01	C	0.01	C	0.01	C	0.005	C	0.007	C
Silicon			na		na		25		22.00	C	na		na		na	
Silver	*0.05*	*0.05*	<0.0033	U	<0.001	C, H	<0.1	C	<0.1	D	<0.001		<0.001	C, H	<0.001	
Sodium			81.8	N, A	*na*		*na*		*na*		*na*		*na*		*na*	
Strontium			na		na		1.3		1.3	C	na		na		na	
Thallium		*0.002*	<0.0033	U	na		na		na		na		na		na	
Tin			na		na		0.1	D	<0.1		na		na		na	
Vanadium			0.132	N, A	na		<0.1	C	<0.1	C	na		na		na	
Zinc	*10.0*	*5.0*	1.27	N, A	0.42	C, H	0.2	C	0.30	C	0.07		0.07	C, H	0.12	

Table 5
Cal West Metals Groundwater Analytical Data

Data Qualifier Codes and Definitions

A=Insufficient sample for analysis
B=Laboratory Reagent Blank (RB)
C=Spike recovery between 80-120%
D=Spike recovery <80%or>120%
E=Over Calibration Range
F=Matrix interference suspected
G=Inconsistent resluts; suggest re-sampling
H=Analyzed in duplicate
I=Aanalyzed in Triplicate
J=Estimated quantity, only
K=Holding time exceeded
L=Equals or exceeds USEPA MCL
M=Equals or eceeds USEPA Action Level
N=Insufficient sample to verify results
O=Internal Standards (ICP/MS),60%or>125% when sample analyzed straight
R=The data are unusable
T=Total Metals
TR=Total Recoverable Metals
U=Not detected above the PQL or SDL
UJ=Not detected, Estimated value, only
i=irrigation standard
na= not analyzed
NS=not sampled
exceedes standards

Lead total metal concentrations in 1996 exceeded the State and Federal MCLs in all four regularly sampled wells. Total lead concentrations from CWMW-7 and -9 groundwater samples collected in 1997 exceeded ederal standards, but not State MCLs. Total lead concentrations exceeded the Federal MCL in one well in 1998 (CWMW-9), one well in 1999 (CWMW-7), and in one well tested in 2000 (CWMW-6). All other samples did not contain lead above regulatory standards. No contaminant trends for lead could be identified. Lead in dissolved-phase did not exceed any regulatory standard.

Manganese total metal concentration exceeded State and Federal standards for all five years that groundwater was tested. In 1996 and 1997 four samples collected exceeded State and Federal standards. During the 1998, 1999 and 2000 sampling event three of four wells sampled exceeded both State and Federal standards. No dissolved-phase manganese concentrations exceeded regulatory standards. No contaminant trends were observed.

Background groundwater concentrations of metals from the Site monitoring wells show that there are fairly high concentrations of naturally occurring metals in the groundwater. This is especially true in monitoring wells that were not properly designed and developed that exhibit a high turbidity. As a result, the elevated levels that are periodically detected in the groundwater monitoring well samples are indicative of naturally occurring levels, not a release from the waste at the Site.

In summary, the EPA and NMED have not observed groundwater contamination above background concentrations in the last five years of monitoring. In general, there were no clear trends in total-phase metal concentrations that could be determined. Metal contamination associated with the site does not appear to have impacted groundwater. The repository cell contents do not appear to have leached into groundwater.

7. Assessment

The following conclusions support the determination that the remedy at the site is functioning as designed and is expected to continue to be protective of human health and the environment.

The remedy is functioning as intended by the decision documents. The repository cell is intact and no groundwater contamination is associated with the site.

The assumptions used at the time of remedy selection are still valid. The risked-based level of 640 mg/Kg for lead is acceptable. No new regulatory standards have been developed.

No additional information has been identified that would call into question the protectiveness of the remedy.

8. Deficiencies

Deficiencies noted during the five-year review are summarized in Table 6. None of the deficiencies are sufficient to warrant a finding of the remedy being not protective.

Table 6
Identified Deficiencies

Deficiencies	Currently Affects Protectiveness (Y/N)
Fencing on southeast corner of property was damaged.	No
No warning signs marking boundaries of the repository cell.	No
No monitor well down gradient of the repository cell.	No
No mechanism in place (e.g., zoning, deed restrictions or easements) to prohibit non-industrial use of the property or to keep the cap from being penetrated.	No
Some monitoring wells were not locked and/or capped.	No

The fencing on the southeast corner of the property is damaged and does not restrict access to the property.

There are six steel fence posts marking the boundaries of the repository cell. The steel posts are hard to see and do not have any warning signs indicating that there is a repository cell and that no digging is allowed.

There are no monitoring wells down-gradient from the bulk of the repository cell. Monitoring well CWMW-9 covers only a small down-gradient portion of the southeast portion of the repository cell (Figure 2). The remaining wells are either cross-gradient or up-gradient from the repository cell.

There are no legal restrictions (e.g., zoning, easements or deed restrictions) that prohibit non-industrial use of the Site or that prohibit penetration of the repository.

Some of the monitoring wells were not capped and locked. In order to ensure that the monitoring wells are not tampered with, all of the wells must be capped and locked.

9. Recommendations and Follow-up Actions

Recommendations and follow-up activities are summarized in Table 7.

Table 7
Recommendations and Follow-up Actions

Deficiencies	Recommendations/ Follow-up Actions	Party Responsible	Oversight Agency	Follow-up Actions: Affects Protectiveness (Y/N)
Damaged fencing	Repair fence.	City of Socorro	NMED	No
Boundaries marking perimeter of repository cell	Paint steel posts with flourescent paint and post warning signs on steel posts.	NMED	NMED	No
No down-gradient monitoring well	Install down-gradient monitoring well.	NMED	NMED	No
Institutional control	A letter should be sent to the City, possibly by the NMED, asking the city to restrict the property to industrial use only, and to impose whatever restriction is necessary to make sure that the cap is not penetrated. If possible under State law, or city ordinance, an enforceable restriction (*e.g.*, an easement, or a zoning change) should be imposed on the property stating that the cap must not be penetrated. If such a restriction is not possible under State law, then a deed notice should be filed, stating that the cap is in place and that it must not be penetrated.	City of Socorro	NMED	No
Unlocked monitoring well	Ensure that monitoring wells are locked and capped.	NMED	NMED	No
No continuous data from all monitoring wells	Perform a full round of groundwater sampling at all Site wells.	NMED	NMED	No
Unused monitoring wells could be potential conduits for contaminants	Plug and properly abandon as per NMED requirements.	NMED	NMED	No

The fence should be repaired at the southeast corner of the property with new strands of barbed wire and steel fence posts to limit access. The City of Socorro has agreed to repair the damaged fence by July 2001, and NMED will ensure that the fence is fixed.

The six steel fence posts will be painted with a flourescent paint and will be posted with a sign stating that there is a repository cell and tampering is prohibited. NMED will be responsible for painting the steel fence posts and for posting signs. NMED will complete the upgrade as soon as funding can be secured.

To monitor potential contaminant migration from the repository cell NMED will install a monitoring well that is down gradient of the repository cell as soon as funding can be secured.

A letter should be sent to the City, possibly by the NMED, asking the city to restrict the property to industrial use only, and to impose whatever restriction is necessary to make sure that the cap is not penetrated. If possible under State law, or city ordinance, an enforceable restriction (*e.g.*, an easement, or a zoning change) should be imposed on the property stating that the cap must not be penetrated. If such a restriction is not possible under State law, then a deed notice should be filed, stating that the cap is in place and that it must not be penetrated.

In order to ensure the integrity of the monitoring wells, NMED will cap and lock all wells.

NMED will perform a full round of groundwater sampling so that previous and current groundwater data can be fully analyzed.

To prevent a potential conduit for contaminants, all monitoring and supply wells that are no longer utilized for monitoring will be properly plugged and abandoned by NMED as per NMED requirements.

10. Protectiveness Statement(s)

The remedy at Cal West Metals is protective of human health and the environment. Soils with lead concentrations exceeding 640 mg/kg have been stabilized with grout, disposed of on-site and capped. Groundwater has been sampled annually for five years to verify that contaminated soils disposed on-site have not impacted the groundwater. Groundwater sampling will continue every five years for 25 years to come. Institutional controls to prevent damage to the repository cell, and to restrict access are in place.

Both the approved Health and Safety Plan and the Contingency Plan are in place. These plans have been properly implemented, and are sufficient to control risks that may arise due to the implementation of the remedy. The remedial action taken pursuant to the ROD is protective of both human health and the environment.

The remedial action at the site, as originally set forth in the ROD has been implemented and continues to be protective of human health and the environment. Hazardous substances remain in the repository (i.e., the capped area) at the Site at concentrations levels that are above levels that allow for unlimited use of the repository and unlimited exposure to subsurface repository areas.

11. Next Review

The next review will be conducted within five years of the completion of this five-year review. The completion date is the date of the signature shown on the signature cover attached to the front of this report.

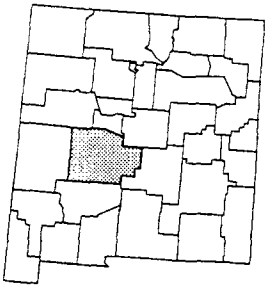
FIGURES

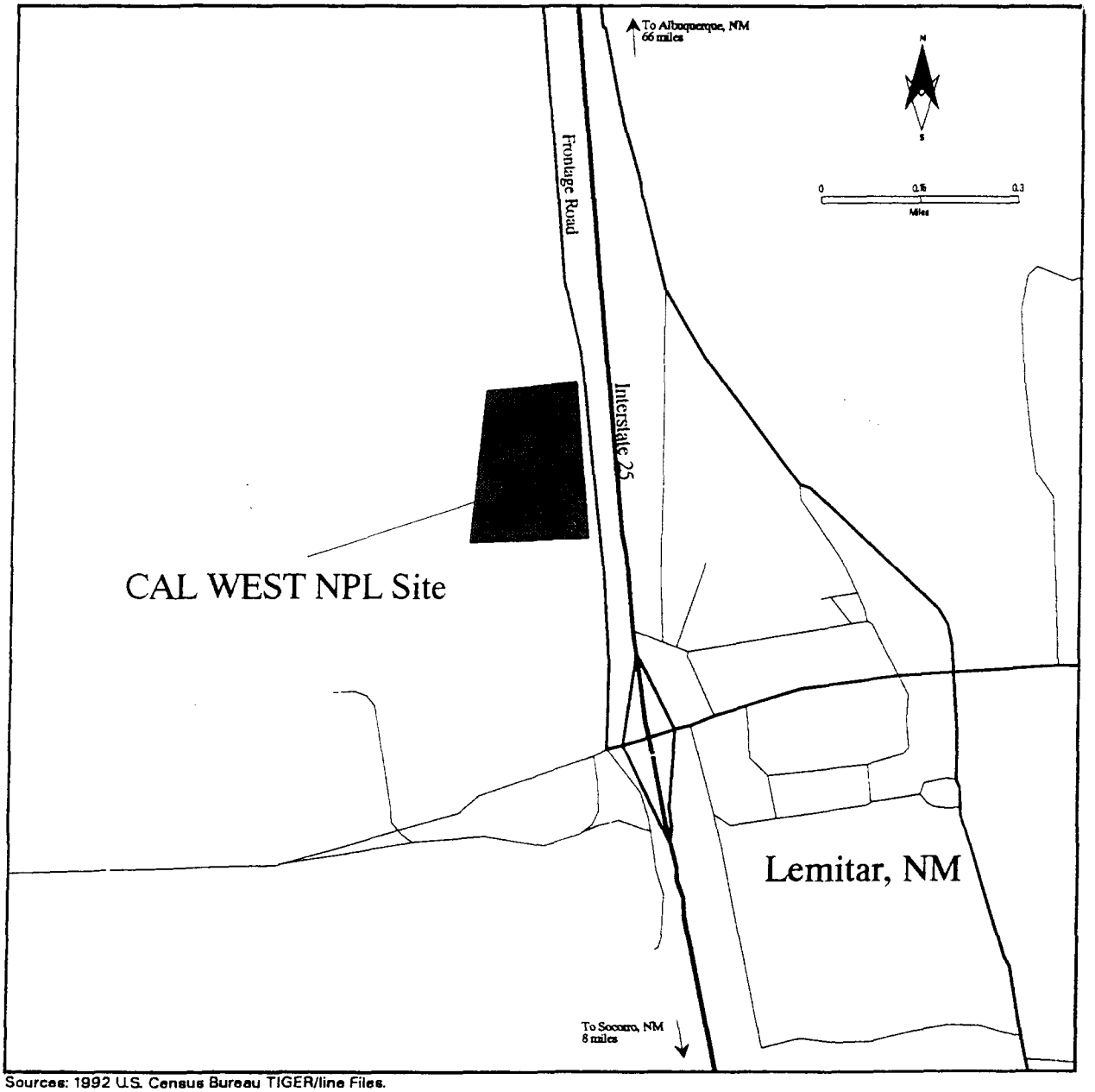
CAL WEST METALS (SBA)
Socorro County, NM
CERCLIS-ID# NMD097960272

This graphic illustrates the NPL boundary presently in the EPA GIS data base. The GIS Support Team is reviewing and updating the NPL site boundaries. This map should be used for reference purposes only. CAL WEST METALS remedial project manager: Agatha Benjamin at (214) 665-7292.

EPA Region 6, Dallas,TX

CDSI





Sources: 1992 U.S. Census Bureau TIGER/line Files.
NPL Site Boundary by EPIC, Washington D.C. 1991

Figure 1 Cal West Metals Location Map

Shane White, CDSI, GIS Analyst, 25 JUNE 1996

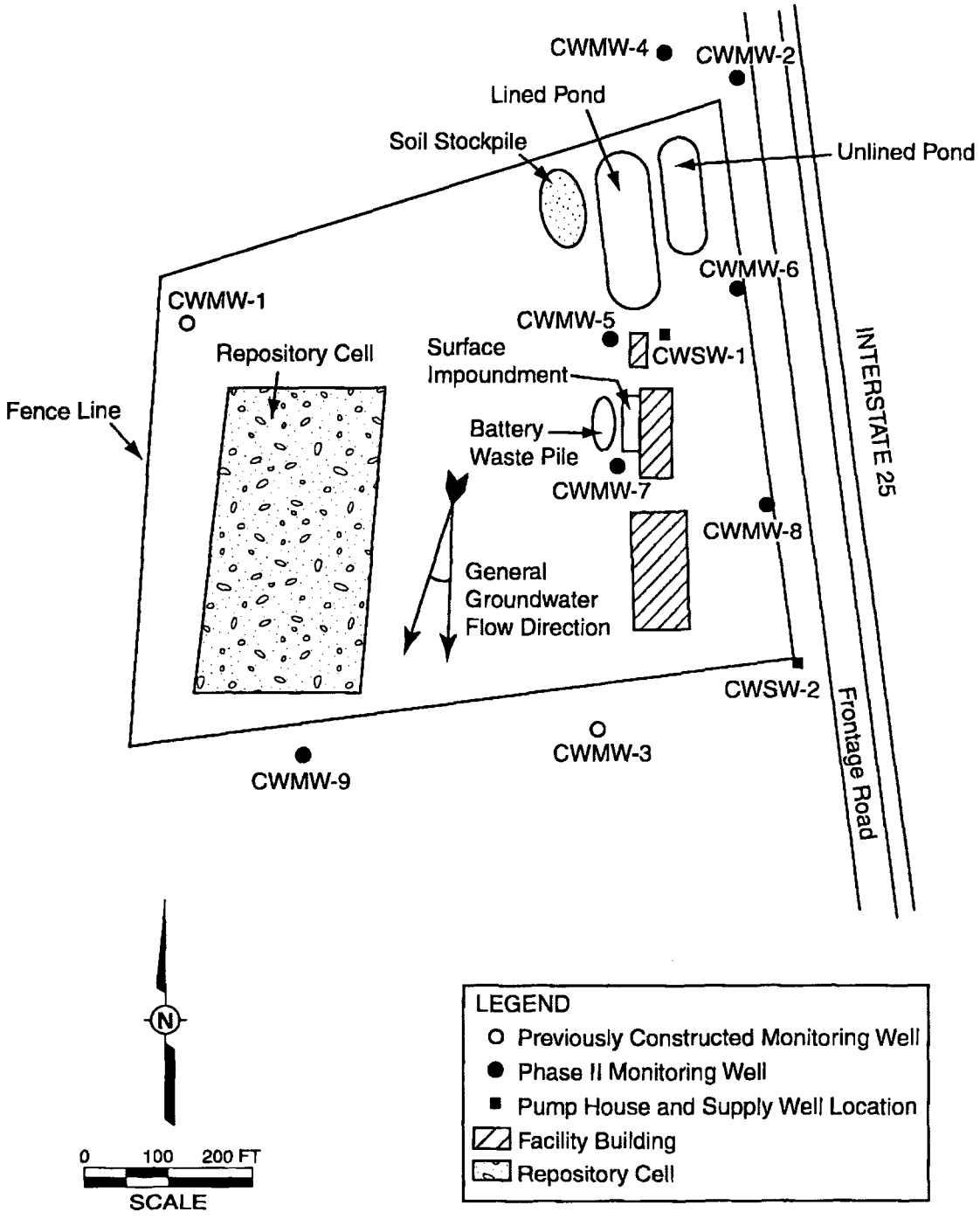
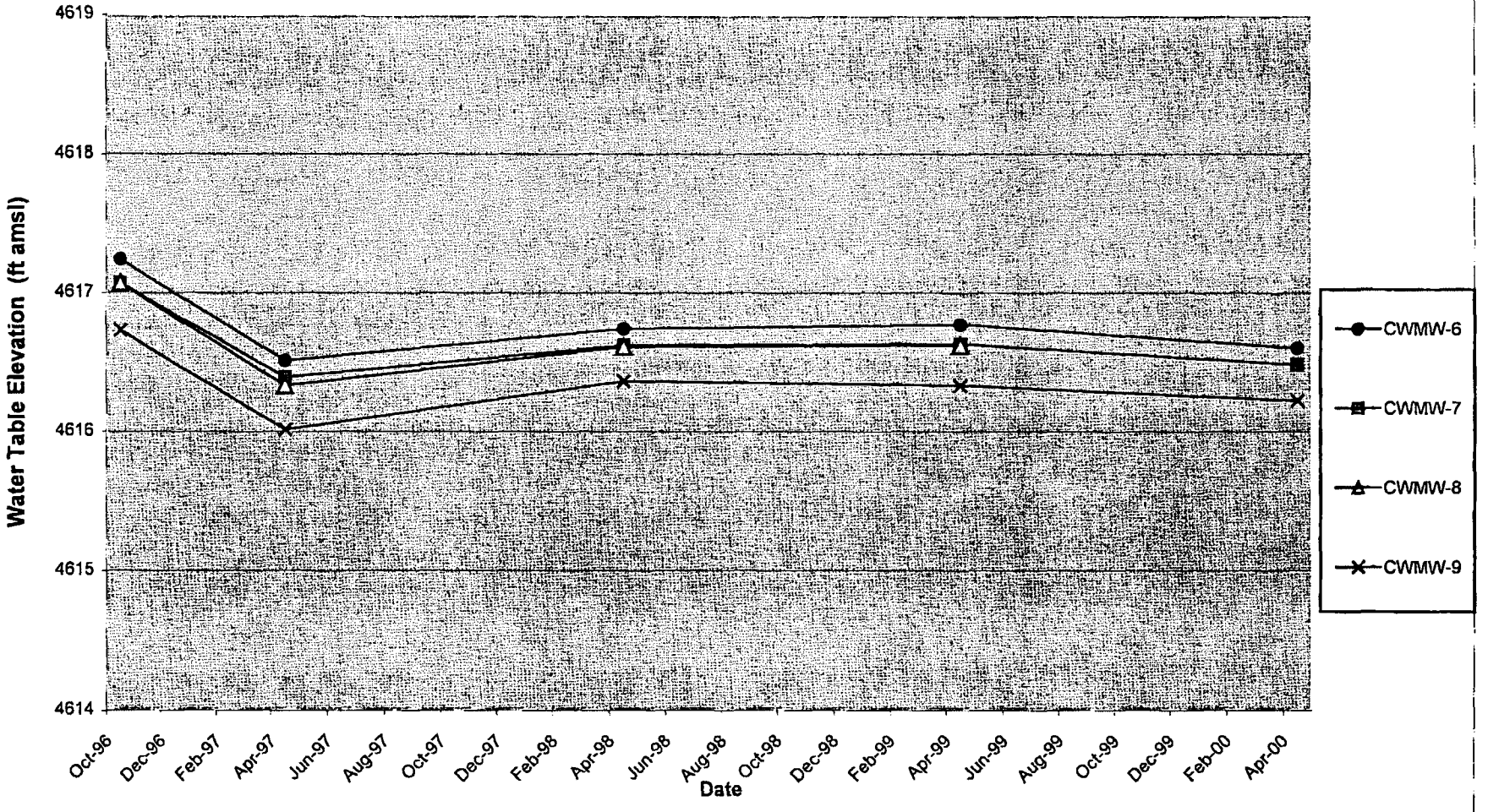


Figure 2: Cal West Metals Site Map

Figure 3
Cal West Metals Hydrograph



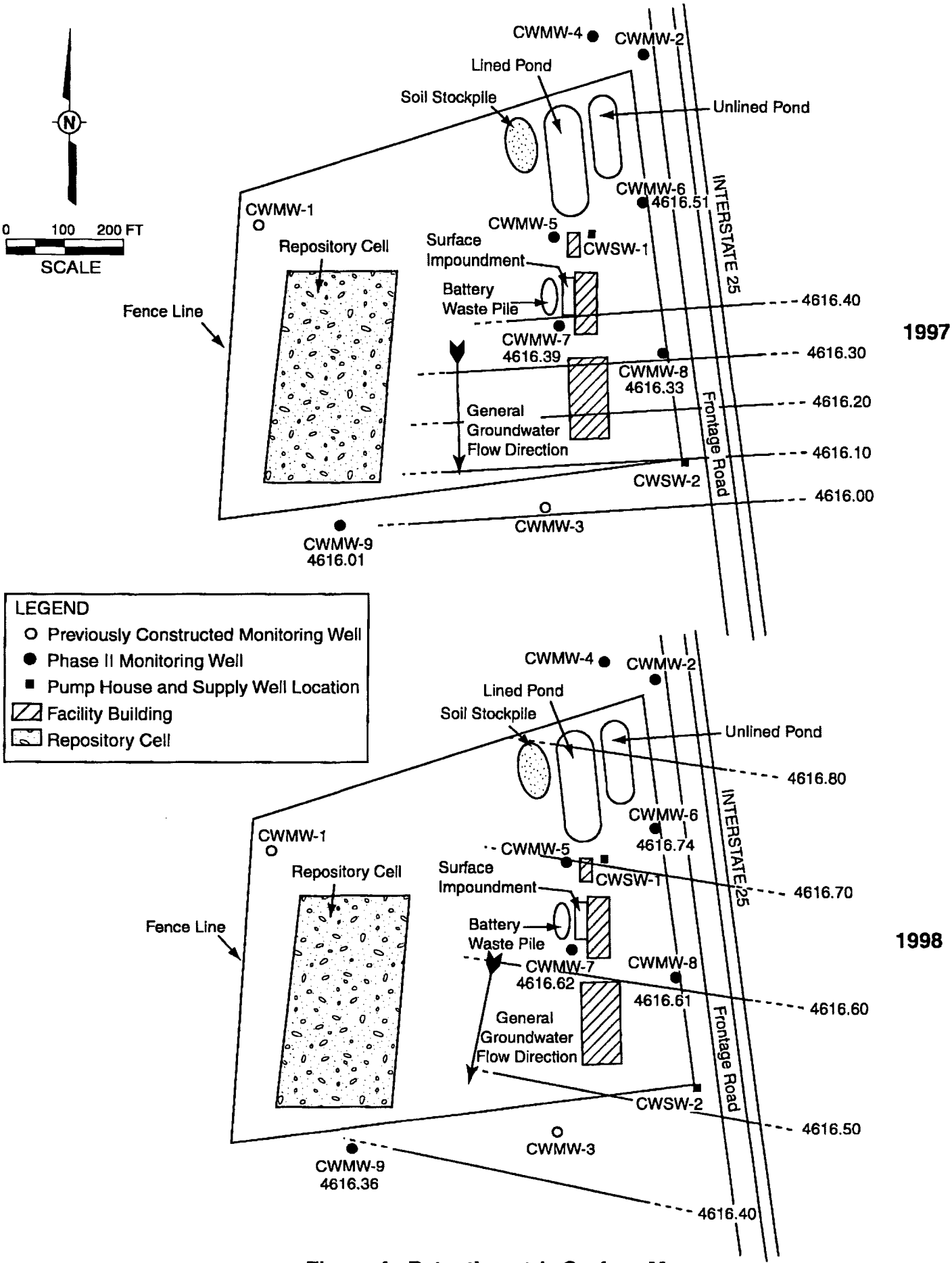


Figure 4: Potentiometric Surface Map, 1997 & 1998 Cal West Metals

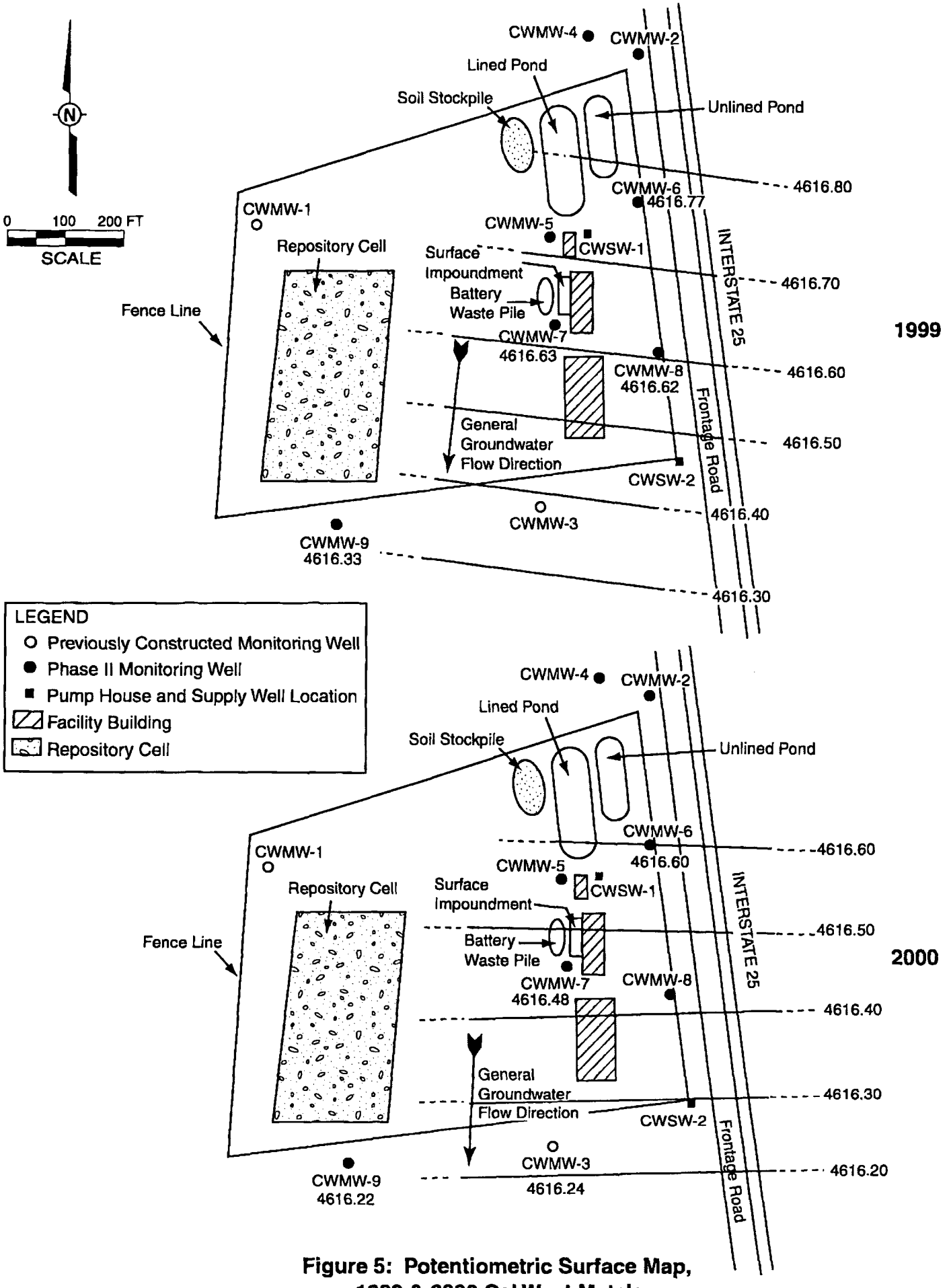


Figure 5: Potentiometric Surface Map, 1999 & 2000 Cal West Metals

Attachment 1
Documents Reviewed

Attachment 1
Documents Reviewed

EPA, 2000. Web site for Record of Decision Abstracts Cal West Metals (USSBA). *www.epa.gov/superfund/sites/rodsites.0604050.htm.* April 20, 2000.

EPA, 1999. Comprehensive Five-Year Review Guidance. EPA540R-98-050, OSWER Directive 9355.7-03B-P, Draft,October1999.

EPA 1996. Final Closeout Report for Cal West Metals. June 1996.

EPA, 1995. Preliminary Closeout Report Cal West Metals. September 1995.

EPA, 1992. September 29, 1992 Record of Decision for the Cal West Metals Superfund Site. September 29, 1992.

NMED, Field Log Book entries 1996 to 2000.

NMED, 1997. Operation and Maintenance Manual. March 21, 1997.

NMED, 1992. Remedial Investigation/Feasibility Study Phase II, April 23, 1992.

NMED, 1990. Remedial Investigation/Feasibility Study Phase I.

NMED, 1986. Site Inspection Follow-up.

NMED, 1985. CERCLA Site Inspection., August 1985.

Attachment 2

Interview Record Forms

INTERVIEW RECORD

Site Name: Cal West Metals		**EPA ID No.: NMD097960272**	
Subject:	Site Status/Five-Year Review	**Time:** 4:00	**Date: 8/31/00**
Type:	☐ Telephone ☒ Visit ☐ Other:		
Location of Visit: City Clerk Office			
Contact Made By			
Name: Birgit Landin	**Title:** Geologist	**Organization: NMED/SOS**	
Individual Contacted			
Name: Patrick Salome, Jay Santianes	**Title:** City Clerk, Water Systems Superintendent	**Organization:** City of Socorro	

Telephone No.: (505) 835-0240
Fax No.:
E-Mail Address:
Street Address: P.O. Drawer K
City, State, Zip: Socorro, New Mexico 87801

Summary Of Conversation

Question 1:
What is your impression of the project?
Good, Clean. People are frequently requesting information on the property.

Question 2:
Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) Conducted by your office regarding the site? If so, please give purpose and results. City sends people periodically to check on the buildings.

Question 3:
Have there been any complaints, violations, or other incidents related to the site requiring a response by your office? If so, please give details of the events and results of the responses.
No.

Question 4:
Do you feel well informed about the site's activities and progress?
Yes, property has a clean bill of health.

Question 5:
Do you have any comments, suggestions, or recommendations regarding the site's management or operation?
Records are kept in house and are aware of restrictions. Property is asked for more often than any other.

INTERVIEW RECORD

Site Name: Cal West Metals		**EPA ID No.: NMD097960272**	
Subject:	Site Status/Five-Year Review	**Time: 1400**	**Date: 7/31/00**
Type:	☐ Telephone ☒ Visit ☐ Other:		
Location of Visit: Cal West Metals Site			
Contact Made By			
Name: Birgit Landin	**Title: Geologist**	**Organization: NMED/SOS**	
Individual Contacted			
Name: Glenn Allan Ezell	**Title: President**	**Organization: Ezell Aluminum Fabrication**	

Telephone No.: (505) 838-0302
Fax No.: (505) 838-0297
E-Mail Address:
Street Address: 57 W. Frontage Rd.
City, State, Zip: Lemitar, NM 87823

Summary Of Conversation

Question 1:
What is your impression of the project?
I know that lead was reclaimed here. They scraped up the dirt and buried. I feel it was a waste of time.

Question 2:
What effect have site operations had on the surrounding community?
No effect on site operations.

Question 3:
Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details.
No concerns.

Question 4:
Are you aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities? If so, please give details.
No

Question 5:
Do you feel well informed about the site's activities and progress?
The city did not mention the restrictions about the repository cell.

Question 6:
Do you have any comments, suggestions, or recommendations regarding the site's management or operation?
The only problem was the city water. I've recently had the city water connected to the facility but there is a strange odor and it tastes bad. I think the water is bad in the lines to the building. Can't have the lines flushed now that it is hooked to the building. The reason I didn't use the well that is in the property is because I didn't know if it was good.

INTERVIEW RECORD

Site Name: Cal West Metals		**EPA ID No.: NMD097960272**	
Subject:	Site Status/Five-Year Review	**Time:** 4:30	**Date: 7/31/00**
Type:	☐ Telephone ☒ Visit ☐ Other:		
Location of Visit: Cal West Metals			
Contact Made By			
Name: Birgit Landin	**Title: Geologist**	**Organization:** NMED/SOS	
Individual Contacted			
Name: Richard Sanchez	**Title: Citizen**	**Organization:**	

Telephone No.: (505) 838-4437
Fax No.:
E-Mail Address:
Street Address: P.O. Box 3
City, State, Zip: Socorro, NM 87801

Summary Of Conversation

Question 1:
What is your impression of the project?
There are more contaminated sites out there that are far worse than Cal West Metals.

Question 2:
What effect have site operations had on the surrounding community?
None.

Question 3:
Are you aware of any community concerns regarding the site or its operation and administration?
Some people don't like the "recycling center idea", but I am okay with the idea.

Question 4:
Are you aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities? If so please give details. No.

Question 5:
Do you feel well informed about the site's activities and progress? Yes

Question6:
Do you have any comments, suggestions, or recommendations regarding the site's management or operation?
No

INTERVIEW RECORD

Site Name: Cal West Metals		**EPA ID No.: NMD097960272**	
Subject:	Site Status/Five-Year Review	**Time:** 4:30	**Date: 7/31/00**

Type: ☐ Telephone ✗ Visit ☐ Other:

Location of Visit: Cal West Metals

Contact Made By

Name: Birgit Landin **Title: Geologist** **Organization:** NMED/SOS

Individual Contacted

Name: James S. Green **Title: Citizen** **Organization:**

Telephone No.: (505) 838-4437
Fax No.:
E-Mail Address:
Street Address: **P.O. Box 3**
City, State, Zip: Socorro, NM 87801

Summary Of Conversation

Question 1:
What is your impression of the project?
There are more contaminated sites out there that are far worse than Cal West Metals.

Question 2:
What effect have site operations had on the surrounding community?
None.

Question 3:
Are you aware of any community concerns regarding the site or its operation and administration?
Some people don't like the "recycling center idea", but I am okay with the idea.

Question 4:
Are you aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities? If so please give details. No.

Question 5:
Do you feel well informed about the site's activities and progress? Yes

Question6:
Do you have any comments, suggestions, or recommendations regarding the site's management or operation?
no

INTERVIEW RECORD

Site Name: Cal West Metals		**EPA ID No.: NMD097960272**	
Subject:	Site Status/Five-Year Review	**Time:** 12:00	**Date:** 8/4/00
Type:	☒ Telephone ☐ Visit ☐ Other:		
Location of Visit:			
Contact Made By			
Name: Sabino Rivera	**Title:** Env. Scientist	**Organization:** NMED/SOS	
Individual Contacted			
Name: Hector Leon	**Title:** nearest neighbor	**Organization:**	

Telephone No.: (505) 263-8197
Fax No.:
E-Mail Address:
Street Address: PO Box 73
City, State, Zip: Lemitar, NM 87823

Summary Of Conversation

Question 1
What is your impression of the project?
I feel that they did a good job and was accomplished in a timely manner. There was no mess involved.

Question 2
What effect have site operations had on the surrounding community?
I have not noticed any difference that the site has had on the community. No negative effects.

Question 3
Are you aware of any community concerns regarding the site or its operation and administration? If so please give details.
No

Question 4
Are you aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities? If so, please give details.
No

Question 5
Do you feel well informed about the site's activities and progress?
Not really. I don't know where I can get information on the site

Question 6
Do you have any comments, suggestions, or recommendations regarding the site's management or operation? No

Attachment 3

Site Inspection Checklist

Cal West Metals
Five-Year Review Site Inspection Checklist

Please note that "O&M" is referred to throughout this checklist. At sites where Long-Term Response Actions are in progress, O&M activities may be referred to as "system operations" since these sites are not considered to be in the O&M phase while being remediated under the Superfund program. N/A means "not applicable."

I. SITE INFORMATION	
Site Name: Cal West Metals	**EPA ID: NMD097960272**
City/State: Lemitar, New Mexico	**Date of Inspection: 7/31/00**
Agency Completing 5 Year Review: NMED	**Weather/temperature:** sunny, 95° Fahrenheit
Remedy Includes: (Check all that apply) x Landfill cover/containment ☐ Access controls ☐ Institutional controls ☐ Groundwater pump and treatment ☐ Surface water collection and treatment ☐ Other:	
Attachments: ☐ Inspection team roster attached	x Site map attached

II. INTERVIEWS (Check all that apply)

1. **O&M site manager:**
   Name:
   Title:
   Date:
   Interviewed: ☐ at site ☐ at office ☐ by phone Phone Number:
   Problems, suggestions: ☐ Additional report attached (if additional space required).

1. **O&M staff:**
   Name:
   Title:
   Date:
   Interviewed: ☐ at site ☐ at office ☐ by phone Phone Number:
   Problems, suggestions: ☐ Additional report attached (if additional space required).

2. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

Agency: City of Socorro Waste Water Treatment Plant
Contact:
Name: Richard Sanchez
Title: Superintendent
Date: July 31, 2000
Phone Number: (505) 835-0240
Problems, suggestions: ☐ Additional report attached (if additional space required).

Agency: City of Socorro City Clerk
Contact:
Name: Patrick Salome Jr.
Title: City Clerk
Date: July 31, 2000
Phone Number: (505) 835-0240
Problems, suggestions: ☐ Additional report attached (if additional space required).

Agency:
Contact:
Name:
Title:
Date:
Phone Number:
Problems, suggestions: ☐ Additional report attached (if additional space required).

Agency:
Contact:
Name:
Title:
Date:
Phone Number:
Problems, suggestions: ☐ Additional report attached (if additional space required).

3. **Other interviews** (optional) ☐ N/A ☐ Additional report attached (if additional space required).

Glen Allen Ezell, Ezell Aluminum Fabrication (on-site leasee) ; Hector Leon, nearest neighbor; James Green, citizen

III. ONSITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)			
1. O&M Documents			
X O&M Manual	X Readily available	X Up to date	☐ N/A
X As-Built Drawings	☐ Readily available	X Up to date	☐ N/A
☐ Maintenance Logs	☐ Readily available	☐ Up to date	☐ N/A
Remarks:			
In NMED site files			
2. Health and Safety Plan Documents			
X Site-Specific Health and Safety Plan	X Readily available	X Up to date	☐ N/A
☐ Contingency plan/emergency response plan	☐ Readily available	☐ Up to date	☐ N/A
Remarks:			
In NMED site files.			
3. O&M and OSHA Training Records	☐ Readily available	☐ Up to date	☐ N/A
Remarks:			
4. Permits and Service Agreements			
☐ Air discharge permit	☐ Readily available	☐ Up to date	☐ N/A
☐ Effluent discharge	☐ Readily available	☐ Up to date	☐ N/A
☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☐ N/A
☐ Other permits	☐ Readily available	☐ Up to date	☐ N/A
Remarks:			
5. Gas Generation Records	☐ Readily available	☐ Up to date	☐ N/A
Remarks:			
6. Settlement Monument Records	☐ Readily available	☐ Up to date	☐ N/A
Remarks:			
7. Groundwater Monitoring Records	X Readily available	X Up to date	☐ N/A
Remarks:			
In NMED site files			
8. Leachate Extraction Records	☐ Readily available	☐ Up to date	☐ N/A
Remarks:			
9. Discharge Compliance Records	☐ Readily available	☐ Up to date	☐ N/A
Remarks:			
10. Daily Access/Security Logs	☐ Readily available	☐ Up to date	☐ N/A
Remarks:			

IV. O&M Costs ☒ Applicable ☐ N/A

1. O&M Organization
X State in-house ☐ Contractor for State
☐ PRP in-house ☐ Contractor for PRP
☐ Other:

2. O&M Cost Records
X Readily available ☐ Up to date ☐ Funding mechanism/agreement in place
Original O&M cost estimate: ☐ Breakdown attached
$5000/year

Total annual cost by year for review period if available

From (Date):	To (Date):	Total cost:	
January 1996	December 1996	$6,800	☐ Breakdown attached
From (Date):	To (Date):	Total cost:	
January 1997	December 1997	$3,800	☐ Breakdown attached
From (Date):	To (Date):	Total cost:	
January 1998	December 1998	$3,500	☐ Breakdown attached
From (Date):	To (Date):	Total cost:	
January 1999	December 1999	$3,800	☐ Breakdown attached
From (Date):	To (Date):	Total cost:	
January 2000	September 2000	$3,500	☐ Breakdown attached

3. Unanticipated or Unusually High O&M Costs During Review Period X N/A
Describe costs and reasons:

V. ACCESS AND INSTITUTIONAL CONTROLS ☒ Applicable ☐ N/A

A. Fencing

1. Fencing damaged X Location shown on site map ☐ Gates secured ☐ N/A
Remarks:
Fencing damaged on southeast corner of property

B. Other Access Restrictions

1. Signs and other security measures X Location shown on site map ☐ N/A
Remarks:
Sign on south end of fenced area stating "Authorized Personnel Only" is not easily seen. Repository cell boundaries not clearly and visibly marked. No warning or restriction signs poste on or near cell.

C. Institutional Controls

1. Implementation and enforcement

Site conditions imply ICs not properly implemented: X Yes ☐ No ☐ N/A
Site conditions imply ICs not being fully enforced: X Yes ☐ No ☐ N/A
Type of monitoring (e.g, self-reporting, drive by):
Frequency: As needed
Responsible party/agency: City of Socorro
Contact: Patrick Salome
Name:
Title: City Clerk
Date:
Phone Number: (505) 835-0240
Reporting is up-to-date: ☐ Yes X No ☐ N/A
Reports are verified by the lead agency: ☐ Yes X No ☐ N/A
Specific requirements in deed or decision documents have been met: ☐ Yes X No ☐ N/A
Violations have been reported: ☐ Yes X No ☐ N/A
Other problems or suggestions: ☐ Additional report attached (if additional space required).

2. Adequacy X ICs are adequate ☐ ICs are inadequate ☐ N/A
Remarks:
ICs are adequate if enforced

D. General

1. Vandalism/trespassing ☐ Location shown on site map X No vandalism evident
Remarks:

2. Land use changes onsite ☐ N/A
Remarks:
Warehouse on southeast corner of fenced area is currently being utilized as a fabrication area for aluminum toolboxes and external gas tanks for pickup trucks.

3. Land use changes offsite X N/A
Remarks:

VI. GENERAL SITE CONDITIONS

A. Roads ☐ Applicable X N/A

1. Roads damaged ☐ Location shown on site map ☐ Roads adequate ☐ N/A
Remarks:

B. Other Site Conditions

Remarks:
It was noted during annual O&M in April 2000 alkali build near south end of the repository cell. However, during the site inspection of July 2000 that thee was no alkali noted. On April 2000 during annual O&M, it was also noted that a back-hoe attempted to dig through the concrete cap while installing a gas line.

VII. LANDFILL COVERS

X Applicable ☐ N/A

A. Landfill Surface

1. **Settlement** (Low spots) ☐ Location shown on site map X Settlement not evident
   Areal extent: Depth:
   Remarks:

2. **Cracks** ☐ Location shown on site map X Cracking not evident
   Lengths: Widths: Depths:
   Remarks:

3. **Erosion** ☐ Location shown on site map X Erosion not evident
   Areal extent: Depth:
   Remarks:

4. **Holes** ☐ Location shown on site map X Holes not evident
   Areal extent: Depth:
   Remarks:

5. **Vegetative Cover**
   X Cover properly established ☐ No signs of stress ☐ Grass ☐ Trees/Shrubs
   Remarks:
   Vegetation missing where recently excavated around edge of cell.

6. **Alternative Cover (armored rock, concrete, etc.)** XN/A
   Remarks:

7. **Bulges** ☐ Location shown on site map X Bulges not evident
   Areal extent: Height:
   Remarks:

8.	**Wet Areas/Water Damage**			X Wet areas/water damage not evident
	☐ Wet areas	☐ Location shown on site map	Areal extent:	
	☐ Ponding	☐ Location shown on site map	Areal extent:	
	☐ Seeps	☐ Location shown on site map	Areal extent:	
	☐ Soft subgrade	☐ Location shown on site map	Areal extent:	
	Remarks:			
9.	**Slope Instability**	☐ Slides	☐ Location shown on site map	X No evidence of slope instability
	Areal extent:			
	Remarks:			
B.	**Benches**			☐ Applicable X N/A
	(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)			
1.	**Flows Bypass Bench**	☐ Location shown on site map		☐ N/A or okay
	Remarks:			
2.	**Bench Breached**	☐ Location shown on site map		☐ N/A or okay
	Remarks:			
3.	**Bench Overtopped**	☐ Location shown on site map		☐ N/A or okay
	Remarks:			
C.	**Letdown Channels**			☐ Applicable X N/A
	(Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)			
1.	**Settlement**	☐ Location shown on site map		☐ No evidence of settlement
	Areal extent:	Depth:		
	Remarks:			
2.	**Material Degradation**	☐ Location shown on site map		☐ No evidence of degradation
	Material type:	Areal extent:		
	Remarks:			
3.	**Erosion**	☐ Location shown on site map		☐ No evidence of erosion
	Areal extent:	Depth:		
	Remarks:			

4. Undercutting ☐ Location shown on site map ☐ No evidence of undercutting
Areal extent: Depth:
Remarks:

5. Obstructions ☐ Location shown on site map ☐ N/A
Type:
Areal extent: Height:
Remarks:

6. Excessive Vegetative Growth ☐ No evidence of excessive growth
☐ Evidence of excessive growth ☐ Vegetation in channels but does not obstruct flow
☐ Location shown on site map Areal extent:
Remarks:

D. Cover Penetrations ☐ Applicable X N/A

1. Gas Vents ☐ N/A
☐ Active ☐ Passive ☐ Routinely sampled
☐ Properly secured/locked ☐ Functioning ☐ Good condition
☐ Evidence of leakage at penetration ☐ Needs O& M
Remarks:

2. Gas Monitoring Probes ☐ N/A
☐ Routinely sampled
☐ Properly secured/locked ☐ Functioning ☐ Good condition
☐ Evidence of leakage at penetration ☐ Needs O&M
Remarks:

3. Monitoring Wells (within surface area of landfill) ☐ N/A
☒ Routinely sampled
☐ Properly secured/locked ☐ Functioning ☒ Good condition
☐ Evidence of leakage at penetration ☐ Needs O&M
Remarks: CWMW 6, CWMW-7, CWMW-8, CWMW-9 have been routinely sample since 4/96. CWMW-3 was sampled on 4/2000

4. Leachate Extraction Wells ☐ N/A
☐ Routinely sampled
☐ Properly secured/locked ☐ Functioning ☐ Good condition
☐ Evidence of leakage at penetration ☐ Needs O&M
Remarks:

5. Settlement Monuments ☐ Located ☐ Routinely surveyed ☐ N/A
Remarks:

E.	**Gas Collection and Treatment**	☐ Applicable	X N/A
1.	**Gas Treatment Facilities** ☐ Flaring ☐ Thermal destruction ☐ Collection for reuse ☐ Good condition ☐ Needs O& M Remarks:		☐ N/A
2.	**Gas Collection Wells, Manifolds and Piping** ☐ Good condition ☐ Needs O& M Remarks:		☐ N/A
3.	**Gas Monitoring Facilities** (e.g., gas monitoring of adjacent homes or buildings) ☐ Good condition ☐ Needs O& M Remarks:		☐ N/A
F.	**Cover Drainage Layer**	☐ Applicable	X N/A
1.	**Outlet Pipes Inspected** ☐ Functioning Remarks:	☐ N/A	
2.	**Outlet Rock Inspected** ☐ Functioning Remarks:		☐ N/A
G.	**Detention/Sedimentation Ponds**	☐ Applicable X N/A	
1.	**Siltation** ☐ Siltation evident Areal extent: Depth: Remarks:		☐ N/A
2.	**Erosion** ☐ Erosion evident Areal extent: Depth: Remarks:		☐ N/A
3.	**Outlet Works** ☐ Functioning Remarks:		☐ N/A
4.	**Dam** ☐ Functioning Remarks:	☐ N/A	
H.	**Retaining Walls**	☐ Applicable	X N/A

1.	**Deformations** ☐ Location shown on site map Horizontal displacement: Vertical displacement: Remarks:		☐ Deformation not evident Rotational displacement:
2.	**Degradation** Remarks:	☐ Location shown on site map	☐ Degradation not evident
I.	**Perimeter Ditches/Off-site discharge**		X Applicable ☐ N/A
1.	**Siltation** Areal extent: Remarks:	☐ Location shown on site map Depth:	X Siltation not evident
2.	**Vegetative Growth** Areal extent: Remarks:	☐ Location shown on site map Type:	X Vegetation does not impede flow
3.	**Erosion** Areal extent: Remarks:	☐ Location shown on site map Depth:	X Erosion not evident
4.	**Discharge Structure** ☐ Functioning Remarks: Berm on west side of cell to prevent catastrophic flooding.	X Location shown on site map X Good Condition	☐ N/A
	VIII. VERTICAL BARRIER WALLS		☐ Applicable X N/A
1.	**Settlement** Areal extent: Remarks:	☐ Location shown on site map Depth:	☐ Settlement not evident
2.	**Performance Monitoring** ☐ Performance not monitored ☐ Performance monitored ☐ Evidence of breaching Remarks:	Frequency: Head differential:	☐ N/A
	IX. GROUNDWATER/SURFACE WATER REMEDIES		☐ Applicable X N/A
A.	**Groundwater Extraction Wells, Pumps, and Pipelines**		☐ Applicable ☐ N/A

1. Pumps, Wellhead Plumbing, and Electrical ☐ N/A
☐ All required wells located ☐ Good condition ☐ Needs O& M
Remarks:

2. Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances ☐ N/A
☐ System located ☐ Good condition ☐ Needs O& M
Remarks:

3. Spare Parts and Equipment ☐ N/A
☐ Readily available ☐ Good condition
☐ Requires Upgrade ☐ Needs to be provided
Remarks:

B. Surface Water Collection Structures, Pumps, and Pipelines ☐ Applicable X N/A

1. Collection Structures, Pumps, and Electrical ☐ N/A
☐ Good condition ☐ Needs O& M
Remarks:

2. Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances ☐ N/A
☐ Good condition ☐ Needs O& M
Remarks:

3. Spare Parts and Equipment ☐ N/A
☐ Readily available ☐ Good condition
☐ Requires Upgrade ☐ Needs to be provided
Remarks:

C. Treatment System ☐ Applicable X N/A

1. Treatment Train (Check components that apply)
☐ Metals removal ☐ Oil/water separation ☐ Bioremediation
☐ Air stripping ☐ Carbon adsorbers ☐ Filters (list type):
☐ Additive (list type, e.g., chelation agent, flocculent)
☐ Others (list):
☐ Good condition ☐ Needs O&M
☐ Sampling ports properly marked and functional
☐ Sampling/maintenance log displayed and up to date
☐ Equipment properly identified
☐ Quantity of groundwater treated annually (list volume):
☐ Quantity of surface water treated annually (list volume):
Remarks:

2.	**Electrical Enclosures and Panels** (properly rated and functional) ☐ Good condition ☐ Needs O& M Remarks:	☐ N/A
3.	**Tanks, Vaults, Storage Vessels** ☐ Good condition ☐ Proper secondary containment ☐ Needs O&M Remarks:	☐ N/A
4.	**Discharge Structure and Appurtenances** ☐ Good condition ☐ Needs O& M Remarks:	☐ N/A
5.	**Treatment Building(s)** ☐ Good condition (esp. roof and doorways) ☐ Needs Repair ☐ Chemicals and equipment properly stored Remarks:	☐ N/A
6.	**Monitoring Wells (pump and treatment remedy)** ☐ All required wells located ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition ☐ Needs O&M Remarks:	☐ N/A
D.	**Monitored Natural Attenuation**	☐ Applicable X N/A
1.	**Monitoring Wells** (natural attenuation remedy) ☐ All required wells located ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition ☐ Needs O&M Remarks:	☐ N/A

X. OTHER REMEDIES ☐ Applicable X N/A

If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

The remedy will eliminate the threat of exposure to the contaminants of concern through direct contact with or ingestion of contaminated site materials. Observed ground water monitoring results indicated that the remedy is functioning as designed.

B. Adequacy of O&M

Four monitoring wells sampled annually for the first five years, then every five years afterward for a total of 30 years. Results from first five years of monitoring indicate no ground water contamination due to the site.

C. Early Indicators of Potential Remedy Failure

There were no indicators noted that would impact the remedy. Repository cell is in good condition.

D. Opportunities for Optimization
Implement institutional controls in property deeds prohibiting tampering with repository cell. Wells that are no longer required for O&M should be plugged to prevent conduits for contamination. Repository cell boundaries should be clearly marked and labeled to prevent digging or tampering with cell.