CHAPTER 3

▸ INSTALLATION-WIDE ENVIRONMENTAL PROGRAM STATUS ◂

This chapter provides a summary of the current status of environmental restoration projects, installation-wide source discovery and assessment activities, and ongoing compliance activities at UMDA. It also summarizes the status of the cultural and natural resource program, and community involvement to date, and describes the environmental condition and suitability for transfer of the installation property.

3.1 Environmental Program Status

The UMDA Environmental Office is responsible for establishing and maintaining all environmental programs, compliance matters, and remediation efforts at UMDA. Two principal U.S. Army components assist the installation's efforts. The USAEC is conducting BRAC site investigation activities at the installation. The USACE Seattle District provides support in areas including RD and RA.

Environmental restoration programs at UMDA are conducted under the DERP in compliance with applicable U.S. Army, DoD, regulations, state and federal statutes and regulations, particularly CERCLA. UMDA was listed on the NPL in July 1987. The lead regulatory oversight agency at the installation is currently the USEPA, Region X. Environmental compliance programs at UMDA are conducted in compliance with applicable U.S. Army, DoD, regulations, state and federal regulatory programs including those administered under the Clean Air Act (CAA), Clean Water Act, and Safe Drinking Water Act, RCRA, Toxic Substance Control Act (TSCA), and SARA.
An environmental restoration program has been in place at UMDA for approximately seven years. A summary of some of the major milestones in the IRP and compliance programs at the installation is provided below.

- A RCRA Facility Assessment (RFA), an Enhanced Preliminary Assessment, a Remedial Investigation/Feasibility Study, a Human Health Baseline Risk Assessment, a Supplemental Remedial Investigation, and a CERFA investigation have been completed.

- Eight RODs and one Decision Document have been signed for the nine OUs at UMDA. Two of the RODs and the Decision Document have "No Action" remedies.

- Remediation has been completed at one OU, and remedial activities have been started at two other OUs. The remaining four OUs are in the remedial design stage.

- Twenty-nine USTs have been removed as early actions. Petroleum-contaminated soils associated with several of these USTs have also been removed as early actions.

- All PCB-containing transformers have been removed.

- An installation-wide asbestos survey and remediation of friable asbestos have been completed.

- An installation-wide lead-based paint survey is scheduled for Fiscal Year 1995.

- A radon venting system is scheduled to be completed in Fiscal Year 1995.

Table 3-1 lists the nine OUs which have been identified at UMDA and the associated sites within each OU. The IRP environmental investigation status, a summary of investigation findings and a final determination for each of the sites are included in the following sections.

3.1.1 Restoration Sites

The restoration effort at UMDA was initiated in October 1978 when the Depot was included in the U.S. Army's IRP. As a result, an Initial Installation Assessment (IIA) was performed in December 1978 to evaluate environmental quality at the Depot with regard to the use, storage, treatment, and disposal of toxic and hazardous materials. Findings of the IIA reported by U.S. Army Toxic and Hazardous Material Agency (USATHAMA) in May 1979 concluded that contamination from explosives existed in certain areas of the Depot as a result of previous demilitarization and disposal operations, but that no evidence was uncovered to indicate actual migration of contaminants from UMDA. The report recommended that a preliminary survey be conducted.

In 1985, the U.S. Army submitted a RCRA Part B permit application to the USEPA to construct and operate an incinerator facility for demilitarizing various chemical munitions in storage at the Depot. This action was in response to the Congressional directive that all of the U.S. Army's chemical stockpile must be disposed of before 1995.

To qualify for the RCRA permit, the 1984 Hazardous and Solid Waste Amendments (HSWA) specify a facility must first implement a corrective action program for past releases of hazardous wastes and constituents. Therefore, USEPA Region X conducted a RFA to identify past, present, or potential sources for contaminant releases from various solid waste management units (SWMUs) or spill sites. The USEPA identified 30 SWMUs at UMDA and determined from its studies that additional investigations were required to identify appropriate corrective measures for several SWMUs. Sites recommended for further evaluation included the ADA Area, which included multiple waste management units; the Explosives Washout Lagoons Area, comprised of two infiltration ponds and a depression thought to have been used as an overflow pond; five

TABLE 3-1. PRELIMINARY LOCATION SUMMARY

Restoration Site No.	Description	Environmental Investigation Report Results/Findings					Final Determination
		RFA	ENPA	RI/SRI	Risk Assessment	Findings	
OU 1 - DEACTIVATION FURNACE SOILS							
Site 1	Deactivation Furnace Soils	✓	✓	✓	✓	Heavy metals with lead as primary contaminant	Contaminated soil will be excavated and disposed as per ROD.
OU 2 - EXPLOSIVES WASHOUT LAGOONS SOILS							
Site 4	Explosives Washout Lagoons Soils	✓	✓	✓	✓	Lagoon soils contaminated with explosives	Contaminated soil will be excavated and disposed as per ROD.
OU 3 - EXPLOSIVES WASHOUT LAGOONS GROUNDWATER							
Site 4	Explosives Washout Lagoons Groundwater		✓	✓	✓	Groundwater beneath lagoons contaminated with explosives	ROD signed in September 1994. Groundwater will be remediated according to signed ROD
OU 4 - AMMUNITION DEMOLITION ACTIVITY AREA OU							
Site 7	Aniline Pit	✓	✓	✓	✓	No contamination identified	No further action as per ROD.
Site 8	Acid Pit	✓	✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 13	Smoke Canister Disposal Area	✓	✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 14	Flare and Fuse Disposal Area	✓	✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 15	TNT Sludge Burial and Burn Area	✓	✓	✓	✓	Heavy metal contamination; estimated hazard index = 80.	Contaminated soil to be remediated as per ROD.
Site 16	Open Detonation Pits	✓	✓	✓	✓	Heavy metal contamination estimated cancer and non-cancer risks were within the acceptable range for residential use.	Phased clearance of UXO as per ROD.
Site 17	Aboveground Open Detonation Area	✓	✓	✓	✓	Lead contamination, cancer risk of 3×10^{-6}.	Contaminated soil to be remediated as per ROD.
Site 18	Dunnage Pits	✓	✓	✓	✓	Heavy metal contamination, estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.

TABLE 3-1. PRELIMINARY LOCATION SUMMARY

Continued

Restoration Site No.	Description	Environmental Investigation Report Results/Findings					Final Determination
		RFA	ENPA	RI/SRI	Risk Assessment	Findings	
Site 19	Open Burning Trenches/Pads	✓	✓	✓	✓	Heavy metal contamination, cancer risk 2×10^{-3}, non-cancer hazard index of 400.	Contaminated soil to be remediated as per ROD.
Site 21	Missile Fuel Storage Areas	✓	✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 31	Pesticide Pits		✓	✓	✓	Heavy metal contamination, cancer risk 5×10^{-4}, non-cancer hazard index 100.	Contaminated soil to be remediated as per ROD.
Site 32	Open Burning Trays (Locations I and II)	✓	✓	✓	✓	Lead contamination, non-cancer hazard index of 1.	Contaminated soil to be remediated as per ROD at Location II.
Site 38	Pit Field Area		✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 41	Chemical Agent Decontamination Solution Burial Area		✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 55	Trench/Burn Field		✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 56	Munitions Crate Burn Area		✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 57	Former Pit Area Locations		✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 58	Borrow/Burn Disposal Area		✓	✓	✓	No contamination identified.	No further action as per ROD.
Site 59	Chemical Agent Decontamination Solution Disposal Area		✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.

TABLE 3-1. PRELIMINARY LOCATION SUMMARY

Continued

Restoration Site No.	Description	Environmental Investigation Report Results/Findings					Final Determination
		RFA	ENPA	RI/SRI	Risk Assessment	Findings	
Site 60	Active Firing Range		✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
OU 5 - MISCELLANEOUS SITES							
Site 3	Hazardous Waste Storage Facility	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 6	Sewage Treatment Plant	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 9	Remote Munitions Disassembly GB Bomb Area	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 10	Former Agent H Storage Area	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 22	DRMO Area	✓	✓	✓	✓	High lead contamination in soil.	Lead contaminated soil will be remediated as per ROD.
Site 25-I	Metal Ore Piles - Location I	✓	✓	✓	✓	Cancer risk was not calculated and there were high uncertainties in the results because, contamination was sporadic and only slightly above background levels, caused the hazard quotient to be excluded.	No further action as per ROD.
Site 25-II	Metal Ore Piles Location II	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 26	Metal Ingot Stockpiles	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.

TABLE 3-1. PRELIMINARY LOCATION SUMMARY

Continued

Restoration Site No.	Description	Environmental Investigation Report Results/Findings					Final Determination
		RFA	ENPA	RI/SRI	Risk Assessment	Findings	
Site 27	Pesticide Storage Building	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 29	Septic Tanks	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 30	Stormwater Discharge Area	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 33	Gravel Pit Disposal Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 34	Paint Spray and Shot Blast Areas		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 35	Malathion Storage Leak Area		✓	✓	✓	High cadmium contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 36	Building 493 Paint Sludge Discharge Area		✓	✓	✓	High cadmium contamination.	Cadmium contaminated soil will be remediated according to the ROD.
Site 37	Building 131 Paint Sludge Discharge Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 39	QA Function Range		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 44-I	Road Oil Application Disposal Sites		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 44-II	Road Oil Application Disposal Sites		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.

TABLE 3-1. PRELIMINARY LOCATION SUMMARY

Continued

Restoration Site No.	Description	Environmental Investigation Report Results/Findings					Final Determination
		RFA	ENPA	RI/SRI	Risk Assessment	Findings	
Site 45	Buildings 612 and 617 Boiler Discharge Areas		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 46	Railcar Unloading Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 47	Boiler/Laundry Effluent Discharge Area		✓	✓	✓	Cancer risk was not calculated and there were high uncertainties in the results because contamination was sporadic and only slightly above background levels, causing the hazard quotients to be excluded.	No further action as per ROD.
Site 48	Pipe Discharge Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 49	Drill and Transfer (DAT) Site		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 50	Railroad Landfill Areas		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 52	Coyote Coulee Discharge Gullies		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 53	Building 433 Collection Sump/Cistern and Disposal Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 67	Building 493 Brass Cleaning Operations Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 80	Disposal Pit and Graded Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 81-1	Former Raw Materials Storage		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.

TABLE 3-1. PRELIMINARY LOCATION SUMMARY

Continued

Restoration Site No.	Description	Environmental Investigation Report Results/Findings					Final Determination
		RFA	ENPA	RI/SRI	Risk Assessment	Findings	
Site 81-II	Former Raw Materials Storage		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 82	Former Gravel Pit/Disposal Location		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
OU 6 - EXPLOSIVE WASHOUT PLANT							
Site 5	Explosive Washout Plant	✓	✓	✓	✓	The Explosive Washout Plant, overflow trough and sump and soil surrounding the plant are contaminated with explosives.	ROD was signed in September 1994. Remediation will be as per ROD.
OU 7 - ACTIVE LANDFILL							
Site 11	Active Landfill	✓	✓	✓	✓	Landfill's current condition does note pose an unacceptable risk to human health or the environment.	ROD signed. No action was selected as the remedy.
OU 8 - INACTIVE LANDFILLS							
Site 12	Inactive Landfills	✓	✓	✓	✓	These landfills current condition does not pose an unacceptable risk to human health or the environment. Two areas within the Northern Inactive Landfill were investigated further in the SRI.	ROD signed. No action was selected as the remedy.
OU 9 - SUPPLEMENTARY REMEDIAL INVESTIGATION (SRI) STUDY SITES AND PCB TRANSFORMER LOCATIONS							
Site 12	Inactive Landfills (Two Areas Within Northern Active Landfills)			✓	✓	No contaminants of concern were identified.	Decision Document was signed in September 1994. U.S. Army and DEQ have agreed that the contaminants at the SRI Study Sites and the PCB transformer locations do not pose sufficient risk to require cleanup and recommended that no RA is necessary under CERCLA. Transite siding at Site 12 will be removed and disposed of properly.
Site 68	Former Unsymmetrical Dimethyl Hydrazine Operations		✓	✓	✓	No contaminants of concern were identified.	See above
Site 69	Area Skunk Works Area		✓	✓	✓	No contaminants of concern were identified.	See above

TABLE 3-1. PRELIMINARY LOCATION SUMMARY

Continued

Restoration Site No.	Description	Environmental Investigation Report Results/Findings					Final Determination
		RFA	ENPA	RI/SRI	Risk Assessment	Findings	
Site 64	Leaking Railcar Shipment Inspection Area		✓	✓	✓	Heavy metal soil contamination. Contaminants of concern in soil pose a risk of less than 1×10^{-6} and a hazard index of less than 1.	See above
Site 70	Wood Preserving Solution Spill Area		✓	✓	✓	Contaminants of concern were identified in groundwater; arsenic, and nitrate/nitrite.	See above
Site 75	Battery Acid Collection Sump		✓	✓	✓	Lead was identified as contaminant of concern in the soil. Contaminants of concern in soil pose a risk of less than 1×10^{-6} and a hazard index of less than 1.	Existing sump will be cleaned out and decontaminated when current operations end.
Site 76	Photographic Chemical Solution Disposal Area		✓	✓	✓	No contaminants of concern were identified.	See above
Site 77	Paint Storage and Disposal Area		✓	✓	✓	No contaminants of concern were identified.	See above
Site 83	Leaking Drum Storage Area		✓	✓	✓	No contaminants of concern were identified.	See above
Site 61	Open Paint Spray Areas		✓	✓	✓	No contaminants of concern were identified.	See above
Site 63	Paint and Solvent Disposal Area		✓	✓	✓	Copper, lead, and zinc were identified as the contaminants of concern in the soil. Contaminants of concern in soil pose a risk of less than 1×10^{-6} and a hazard index of less than 1.	See above
Site 65	Waste Paint and Solvent Disposal Area		✓	✓	✓	Mercury and zinc were identified as the contaminants of concern in the soil. Contaminants of concern in soil pose a risk of less than 1×10^{-6} and a hazard index of less than 1.	See above
Site 66	Brass, Copper, and Steel Storage Area		✓	✓	✓	No contaminants of concern were identified.	See above
Site 79	Malathion Spray Area		✓	✓	✓	No contaminants of concern were identified.	See above

TABLE 3-1. PRELIMINARY LOCATION SUMMARY

Continued

Restoration Site No.	Description	Environmental Investigation Report Results/Findings					Final Determination
		RFA	ENPA	RI/SRI	Risk Assessment	Findings	
PCB Transformer Locations	Transformer locations 162, 163, 164, 197, and 198.		✓	✓	✓	Risk of these sites is 7×10^{-6} due to PCB 1260 in soil, which is only slightly higher than the low end of the acceptable risk range, but still within the acceptable range. No hazard was calculated because no reference dose is available for PCB 1260.	See above
	Transformer location 229.		✓	✓	✓	Soil in concrete value at this location contained 3.8 ppm PCB.	Soil in concrete vault will be cleaned out and properly disposed of as a removal action to comply with State of Oregon's background level rule.
SITES FORMERLY IN AN OU, RECOMMENDED FOR NO FURTHER ACTION							
Site 2	Storage Igloos	✓	✓			Good management practices are believed to preclude environmental concerns.	ENPA recommended no further investigation.
Site 20	Open Burning Areas	✓	✓			Exact location of these areas could not be identified and may actually be burning areas associated with other ADA sites.	ENPA recommended no further investigation.
Site 28	Missile Fuel Burning Areas	✓	✓			Burning reportedly took place in a kiln, not on bare soil, and aniline and hydrazine fuels are not persistent in the environment.	ENPA recommended no further investigation.
Site 40	Jeep Storage Areas		✓			Area is a large parking lot, minor oil leaks.	ENPA recommended no further investigation.
Site 51	Large Open Storage Areas (Vicinity of Coyote Coulee)		✓			Site reconnaissance did not reveal any significant signs of disposal activities of environmental degradation in these areas.	ENPA recommended no further investigation.
Site 54	Possible Disposal Pit Location		✓			Site was not located.	ENPA recommended no further investigation.
Site 72	Vehicle Storage Area		✓			Site is a large parking lot.	ENPA recommended no further investigation.
Site 63	Pier 386 Chemical Solution Disposal Area		✓			During SRI Work Plan preparation, site was reevaluated and it was determined no further investigation was necessary.	Determined no further investigation was necessary, following SRI Work Plan preparation.
Site 71	Possible Fire Training Pit		✓			During SRI Work Plan preparation, site was reevaluated and it was determined no further investigation was necessary.	Determined no further investigation was necessary, following SRI Work Plan preparation.

TABLE 3-1. PRELIMINARY LOCATION SUMMARY

Continued

Restoration Site No.	Description	Environmental Investigation Report Results/Findings					Final Determination
		RFA	ENPA	RI/SRI	Risk Assessment	Findings	
Site 73	Diesel Fuel Spill Location		✓			This site was evaluated in the UST survey.	See UST survey.
Site 74	Oil/Fuel Transfer Station (Building 23)		✓			This site was evaluated under the UST survey.	See UST survey.
Site 78	Building 608 and 615 Heat Exchange Systems		✓			During SRI Work Plan preparation. Site was reevaluated and it was determined no further investigation was necessary.	Determined no further investigation was necessary following SRI Work Plan preparation.
SITES THAT DO NOT FALL UNDER AN OU							
Site 23	Building 5 Waste Oil Tank		✓			This site was evaluated in the UST survey.	See UST survey.
Site 24	Building 10 Waste Oil Tank		✓			This site was evaluated in the UST survey.	This UST has been removed.
Site 42	Former UST Locations		✓			This site was evaluated in the UST survey.	No USTs were confirmed at these locations.
Site 43	Former Gas Station		✓			This was evaluated in the UST survey.	See UST survey.

inactive landfill areas; an active landfill area; septic tanks associated with several buildings; a chemical agent storage area; a deactivation furnace area; waste oil tanks, which include two 500-gallon USTs; and a tile field that is used for disposal of treated sanitary waste.

The Final RFA Report was released in July 1987. As a response to USEPA's report, a work plan was developed to investigate the SWMUs of concern identified in the RFA report.

On April 16, 1984, the USEPA released an Uncontrolled Hazardous Waste Site Hazard Ranking System score for the Explosives Washout Lagoons, which resulted in placement/ranking of the Depot site in a category for possible inclusion on the NPL. The score for the lagoons was 31.31 and the NPL cutoff score is 28.50. UMDA was added to the NPL on July 22, 1987, because of the Explosives Washout Lagoons hazardous waste ranking score.

On October 31, 1989 under CERCLA Section 120 (Administrative Docket Number 1088-06 19-120) which applies to NPL sites, a FFA was signed by representatives of the U.S. Army, UMDA, USEPA Region X, and the ODEQ. The general purposes of the agreement are to:

- Ensure that the environmental impacts associated with past and present activities at UMDA are thoroughly investigated, and appropriate removal and RAs are conducted as necessary to protect public health and welfare and the environment.

- Establish a procedural framework and schedule for developing, implementing, and monitoring appropriate response actions at UMDA in accordance with CERCLA, the National Oil Hazardous Substances Pollution Contingency Plan (NCP), RCRA, and applicable state laws.

- Facilitate cooperation, exchange of information, and participation of the parties in such action.

Since the implementation of the FFA, several investigations have been completed. An ENPA was conducted in 1990. This document addressed all documented or suspected incidents of actual or potential release of hazardous or toxic constituents to the environment. The investigation included the 30 SWMUs identified at the installation and also identified 52 additional sites which required investigation at UMDA.

As a result of the ENPA and RFA, USATHAMA contracted for completion of an RI/FS. The RI/FS investigated 58 of the sites identified in the ENPA including the 30 SWMUs. Three sites were not investigated because they were determined to require no further action. A SRI investigated the remaining 12 sites from the ENPA, in addition to PCB transformer locations, two additional areas within Site 12 (which were investigated during the RI) and a new site, Site 83, the leaking drum storage area. The RI grouped the sites into ten OUs which were regrouped during the RA recommendations into eight OUs. An additional OU was added following the SRI. The purpose was to obtain sufficient data to fully characterize contamination conditions at each study site; complete baseline risk assessments for contaminated sites and environmental media (e.g., soil, groundwater); and perform feasibility studies of, and select RA alternatives for, sites/media requiring cleanup. The ENPA did not recommend additional investigation for

seven of the 82 sites. Six ENPA sites which involved USTs were investigated under the UST survey, and three additional ENPA sites that were to be investigated under the SRI were reevaluated during the SRI work plan preparation. It was determined there was enough information on these three sites and additional investigation was not necessary.

As part of the RI/FS, a Human Health Baseline Risk Assessment was conducted. The risk assessment evaluated the potential for adverse effects to future populations at and adjacent to UMDA as a result of exposure to hazardous substances present at the installation. It also evaluated risk associated with the various RA alternatives presented in the FS.

A second phase of the RI/FS was conducted in 1992/193 for the Explosives Washout Lagoons Soils. This further investigation was completed so that additional information could be collected and used in preparation of pilot treatability studies demonstrating the effectiveness of explosives degradation via composting verses incineration as the demonstrated technology.

During the RI/FS, the sites were grouped into ten OUs. The sites were subsequently regrouped into nine OUs to more effectively address restoration of the property. Record of Decision (RODs) have been signed for eight of the OUs and a DD has been signed between the U.S. Army and the State of Oregon for one OU. Two RODs were "No Action" remedies. The DD is also considered a No Action Alternative (although it does state there will be three minor removals, two of soil and one of transite siding). The six remaining RODs require that OUs undergo RA. The remedial activities at one OU have been completed and remedial activities are underway at a second OU. The remaining four OUs are in RD stage.

Table 3-2 summarizes all the sites that have been investigated as part of the environmental restoration program at UMDA. The DoD Restoration Site Management Information System (RMIS) numbers for the sites are provided in the table where the data are available. The RMIS database tracks the status of IRP activities initially funded through the Defense Environmental Restoration Account from the identification stage to completion of RAs and development of NFRAP documentation. Table 3-2 also lists the OU designations for each site, as well as a brief description, material disposed of, date of operation for the site, restoration status, risk to human health and the environment, regulatory mechanism, and no further remedial action planned categories. The table also provides the reuse parcels/planning areas which may be cross-referenced to the reuse parcel map presented as Figure 2-1. The restoration sites or OUs at UMDA are shown in Figures 3-1A and 3-1B.

There have been no IRP early actions completed at UMDA. All IRP site restoration activities conducted at UMDA have occurred following the ROD and Decision Document process. However, a number of early or interim site restoration activities have been initiated under regulatory compliance programs. These include UST removals/site investigations, petroleum-contaminated soil removal, asbestos and lead-based paint removal, and radon mitigation. These early actions are described in detail in Chapter 3.2.

TABLE 3-2. ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY

Study Area OU (Zone/Reuse Parcel)	Site No.	RMIS Site No.	Site Class	Description	Material Disposed Of	Date of Operation	Status	Risk to Human Health and the Environment	Regulatory Mechanism	CERFA Environmental Category*	DoD Environmental Category**	NFRAP
OU 1/B	1	47	OU	Deactivation Furnace Soils	Particulates, lead	1960s to 1985	ROD/RA	2×10^{-5}	RCRA	C	4	
OU 2/M	4	23/24	OU	Explosives Washout Lagoons Soils	Explosive contaminated rinsewater	1950s to 1965	ROD/RD	4.7×10^{-3}	RCRA	D	6	
OU 3/M&L	4	23/24	OU	Explosives Washout Lagoons Groundwater	Explosive contaminants	1950s to 1965	ROD/RD	3×10^{-3}	RCRA	D	6	
OU 4/A	7	83	OU	Aniline Pit	Aniline	1950s to 1975	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 4/A	8	31	OU	Acid Pit	Red Fuming Nitrite Acids	1955 to 1962	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 4/A	13	84	OU	Smoke Canister Disposal Area	Smoke canisters	1970s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 4/A	14	85	OU	Flare and Fuse Disposal Area	Flares and fuses	1970s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 4/A	15	86	OU	TNT Sludge Burial and Burn Area	TNT Sludges	1960s to 1970s	ROD/RA	4×10^{-4} HQ = 200	RCRA	D	6	
OU 4/A	16	87	OU	Open Detonation Pits	Expired Ordnance	1950s to present	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 4/A	17	88	OU	Aboveground Open Detonation Area	Expired Ordnance	Unknown	ROD/RA	2×10^{-3} HQ = 10	RCRA	D	6	
OU 4/A	18	89	OU	Dunnage Pits	Dunnage	Unknown	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 4/A	19	90	OU	Open Burning Trenches/Pads	Waste Ordnance TNT Sludge	Unknown	ROD/RA	2×10^{-2} HQ - 3000	RCRA	D	6	
OU 4/A	21	92	OU	Missile Fuel Storage Areas	Missile Fuel Storage	1950s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 4/A	28		OU	Missile Fuel Burning Area	Missile Fuels		ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 4/A	31	94	OU	Pesticide Pits	Pesticides	1950s to 1960s	ROD/RA	1×10^{-3} HQ - 22	RCRA	D	6	
OU 4/A	32	95	OU	Open Burning Trays	Solid Propellant	Present	ROD/RA	2×10^{-5} HQ - 2	RCRA	D	6	
OU 4/A	38	96	OU	Pit Field Area	Unknown	Unknown	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 4/A	41	37	OU	Chemical Agent Decontamination Solution Burial Area	Chemical Agent Decontamination Solution	1960s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 4/A	55	98	OU	Trench/Burn Field	Explosive Sludges	1950 to 1956	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 4/A	56	99	OU	Munitions Crate Burn Area	Munition Crate	1940 to 1965	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 4/A	57	100	OU	Former Pit Area Locations	Suspected Releases of Munitions	1940s to 1960s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 4/A	58	101	OU	Borrow/Burn Disposal Area	Suspected Releases of Munitions Burning Activities Munitions	1950s to 1960s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓

TABLE 3-2. ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY

Continued

Study Area OU (Zone/Reuse Parcel)	Site No.	RMIS Site No.	Site Class	Description	Material Disposed Of	Date of Operation	Status	Risk to Human Health and the Environment	Regulatory Mechanism	CERFA Environmental Category*	DoD Environmental Category**	NFRAP
OU 4/A	59	73	OU	Chemical Agent Decontamination Solution Disposal Area	Chemical Agent Decontamination Solution		ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 4/A	60	102	OU	Active Firing Range	Small Arms Munition	Present	ROD/NFA	$<1\times10^{-4}$	RCRA	Q	3	✓
OU 5/B	3	103	OU	Hazardous Waste Storage Facility	Storage Area for Hazardous Waste	1983 to present	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/D	6	9	OU	Sewage Treatment Plant	Sanitary Waste	1941 to present	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/F	9	39	OU	Remote Munitions Disassembly GB Bomb Area	Explosives, GB	1950s to 1960s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/I	10	104	OU	Former Agent H Storage Area	Agent H	1970s	ROD/NFA	C-NC H-.06	RCRA	D	3	✓
OU 5/O	22	105	OU	DRMO Area	Storage Areas Heavy Metals	1960s to present	ROD	$<1\times10^{-4}$ H=1	RCRA	D	6	
OU 5/B	25-I	49	OU	Metal Ore Piles - Location I	Metal Ores	1940s to present	ROD/NFA	$<1\times10^{-4}$	RCRA	C	3	✓
OU 5/E	25-II	49	OU	Metal Ore Piles Location II	Metal Ores	1940s to present	ROD/NFA	$<1\times10^{-4}$	RCRA	C	3	✓
OU 5/B	26	48	OU	Metal Ingot Stockpiles	Metal Ingots	1950 to present	ROD/NFA	$<1\times10^{-4}$	RCRA	C	3	✓
OU 5/O	27	106	OU	Pesticide Storage Building	Storage of Pesticides	1980s to present	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/Multiple Parcels	29	146	OU	Septic Tanks	Sanitary Rinsewaters	1941 to present	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/D	30	107	OU	Stormwater Discharge Area	Stormwater	1941 to present	ROD/NFA	$<1\times10^{-4}$	RCRA	C	3	✓
OU 5/M	33	108	OU	Gravel Pit Disposal Area	Suspected GB/VX Disposal	Unknown	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/E	34	109	OU	Paint Spray and Shot Blast Areas	Paint Overspray and Shot Blasting	1940s to 1970s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/B	35	110	OU	Malathion Storage Leak Area	Malathion	Late 1970s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/M	36	58	OU	Building 493 Paint Sludge Discharge Area	Paint Sludge	?-1970s	ROD/RA	8E-07 HQ - 9	RCRA	D	6	
OU 5/B	37	60	OU	Building 131 Paint Sludge Discharge Area	Paint Sludge	1950s to 1960s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/J	39	2	OU	QA Function Range	Small Arms, Grenades, Mines	1950s to 1980s	ROD/NFA	$<1\times10^{-4}$	RCRA	Q	3	✓
OU 5/O	44-I	114	OU	Road Oil Application Disposal Sites	Road Oil	Unknown	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/B	44-II	114	OU	Road Oil Application Disposal Sites	Road Oil	Unknown	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/F	45	115	OU	Buildings 612 and 617 Boiler Discharge Areas	Boiler Discharge	Present	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/B	46	116	OU	Railcar Unloading Area	Spilled Materials	1940s to 1960s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/M	47	117	OU	Boiler/Laundry Effluent Discharge Area	Laundry Effluent	1940s to 1960s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓

TABLE 3-2. ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY

Continued

Study Area OU (Zone/Reuse Parcel)	Site No.	RMIS Site No.	Site Class	Description	Material Disposed Of	Date of Operation	Status	Risk to Human Health and the Environment	Regulatory Mechanism	CERFA Environmental Category*	DoD Environmental Category**	NTRAP
OU 5/D	48	118	OU	Pipe Discharge Area	Sewage Refuse	1940s to 1960s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/I	49	119	OU	Drill and Transfer (DAT) Site	Explosive Residues	1984	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/M	50	120	OU	Railroad Landfill Areas	Unknown	1940s to 1970s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/M	52	122	OU	Coyote Discharge Gullies	Explosives Heavy Metals	Mid 1950s to 1965	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/Q	53	123	OU	Building 433 Collection Sump/Cistern and Disposal Area	Oil and Grease PCBs/BNAs (Possible) Recommend Investigation of soil for contaminants	1949 to 1988	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/M	67	130	OU	Building 493 Brass Cleaning Operations Area	Brass Cleaning Solutions	Mid 1960s to early 1970s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/B	80	143	OU	Disposal Pit and Graded Area	Unknown, Recommend Site Survey	June 1958 to 1968	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/B	81-I	144	OU	Former Raw Materials Storage	Storage of Raw Materials	1940s to 1960s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/D	81-II	144	OU	Former Raw Materials Storage	Storage of Raw Materials	1940s to 1960s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 5/E	82	145	OU	Former Gravel Pit/Disposal Location	Unknown	1949 to present	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 6/M	5	22	OU	Explosive Washout Plant	Explosive Residues	1950-1965	ROD/RD	2×10^{-3}	RCRA	D	3	✓
OU 7/L	11	34	OU	Active Landfill	Municipal Wastes	1960 to Present	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 8/M&N	12	35	OU	Inactive Landfills	Municipal Wastes	1950s to 1980s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 9/M&N	12	35	OU	Inactive Landfills (Two Areas Within Northern Active Landfills)	Drums	1950s to 1970s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 9/B	68	131	OU	Former Unsymmetrical Dimethyl Hydrazine Operations	Unsymmetrical Dimethyl Hydrazine	1963 to 1968	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 9/C	69	132	OU	Area Skunk Works Area	Hydrochloric Acid Cyanide Brass/Copper Cleaning Solutions	1940s to 1968	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 9/M	64	127	OU	Leaking Railcar Shipment Inspection Area	Leaking munitions, pesticides	1940s to mid 1950s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 9/O	70	133	OU	Wood Preserving Solution Spill Area	Wood Preserving Solution	1960 to 1980	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓

TABLE 3-2. ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY

Continued

Study Area OU (Zone/Reuse Parcel)	Site No.	RMIS Site No.	Site Class	Description	Material Disposed Of	Date of Operation	Status	Risk to Human Health and the Environment	Regulatory Mechanism	CERFA Environmental Category*	DoD Environmental Category**	NFRAP
OU 9/O	75	138	OU	Battery Acid Collection Sump	Neutralized Battery Acid	1950 to 1970	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 9/O	76	139	OU	Photographic Chemical Solution Disposal Area	Photographic Chemicals	1940 to early 1950s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 9/O	77	140	OU	Paint Storage and Disposal Area	Paint Disposal	1940 to 1980s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 9/O	83	147	OU	Leaking Drum Storage Area	MEK, MIKB	1990	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 9 /L	61	124	OU	Open Paint Spray Areas	Paint Overspray	1950 to 1970	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 9/H	62	125	OU	Paint and Solvent Disposal Area	Paint and solvent	early 1980s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 9/I	65	128	OU	Waste Paint and Solvent Disposal Area	Paint and Solvent	1950 to early 1980s	ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓
OU 9/D	66	129	OU	Brass, Copper, and Steel Storage Area	Storage Area	1950s to 1970s	ROD/NFA	$<1\times10^{-4}$	RCRA	C	3	✓
OU 9/K	79	142	OU	Malathion Spray Area	Malathion	1980			ROD/NFA	D	3	
OU 9/Multiple Parcels	PCB Transformer Locations		OU	Transformers 162, 163, 164, 197, and 198	PCB		ROD/NFA	$<1\times10^{-4}$	RCRA	D	3	✓

Key:
- ROD = Record of Decision
- RA = Remedial Action
- RD = Remedial Design
- NFA = No Further Action
- RCRA = Resource Conservation and Recovery Act
- OU = Operable Unit
- CERFA = Community Environmental Response Facilitation Act
- DoD = Department of Defense

*CERFA Environmental Categories:
- C = CERFA Clean
- E = CERFA Excluded
- Q = CERFA Qualified
- D = CERFA Disqualified

See Section 3.4.4 for definitions

**See Section 3.4.5 for definitions

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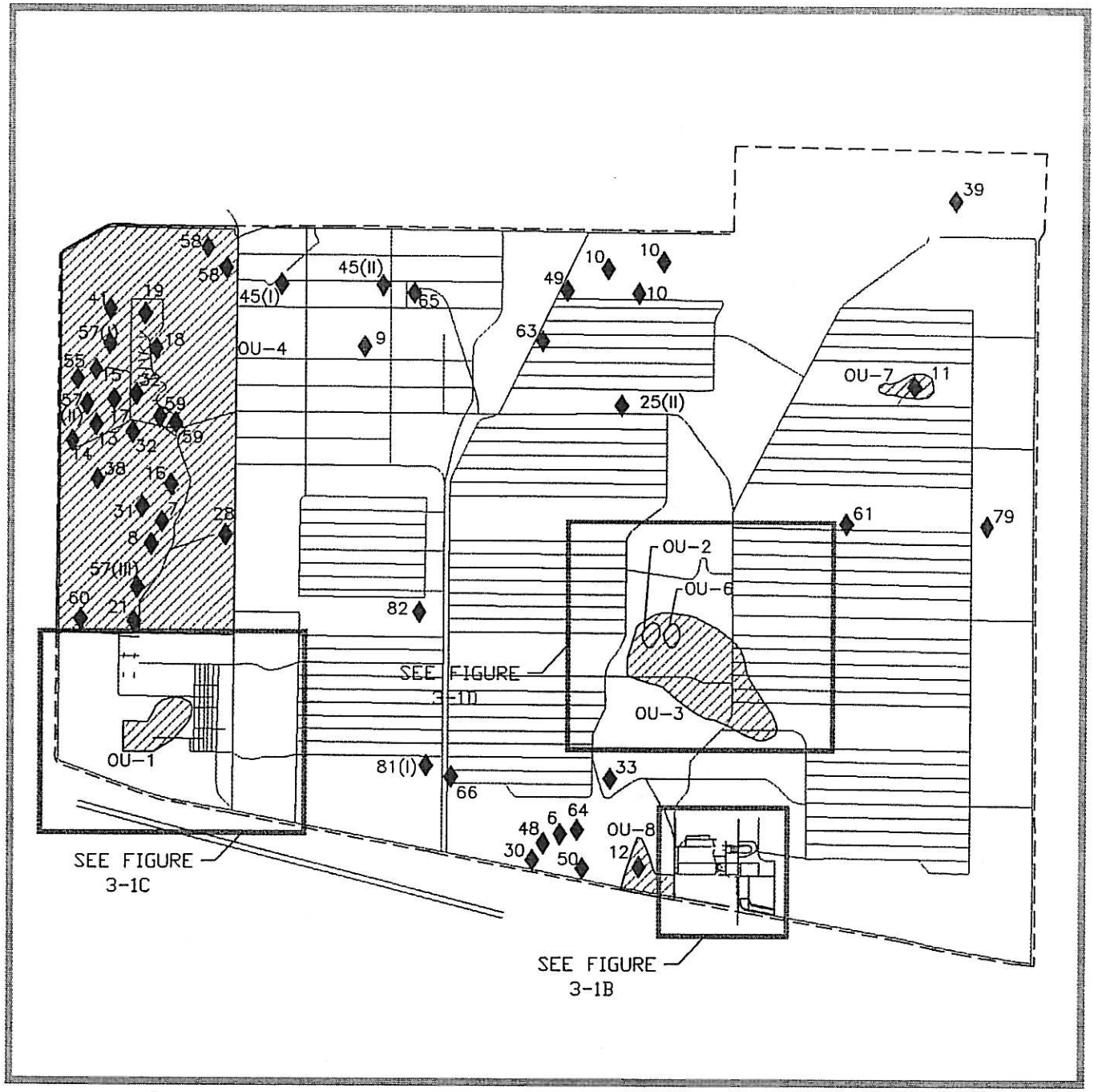

EXPLANATION

- Site
- OUs
- OU & Site
- Installation Boundary

Note: The sites within OU–5 and OU–9 are located throughout the installation.

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Sites and OUs Currently Under Investigation

Figure 3–1A

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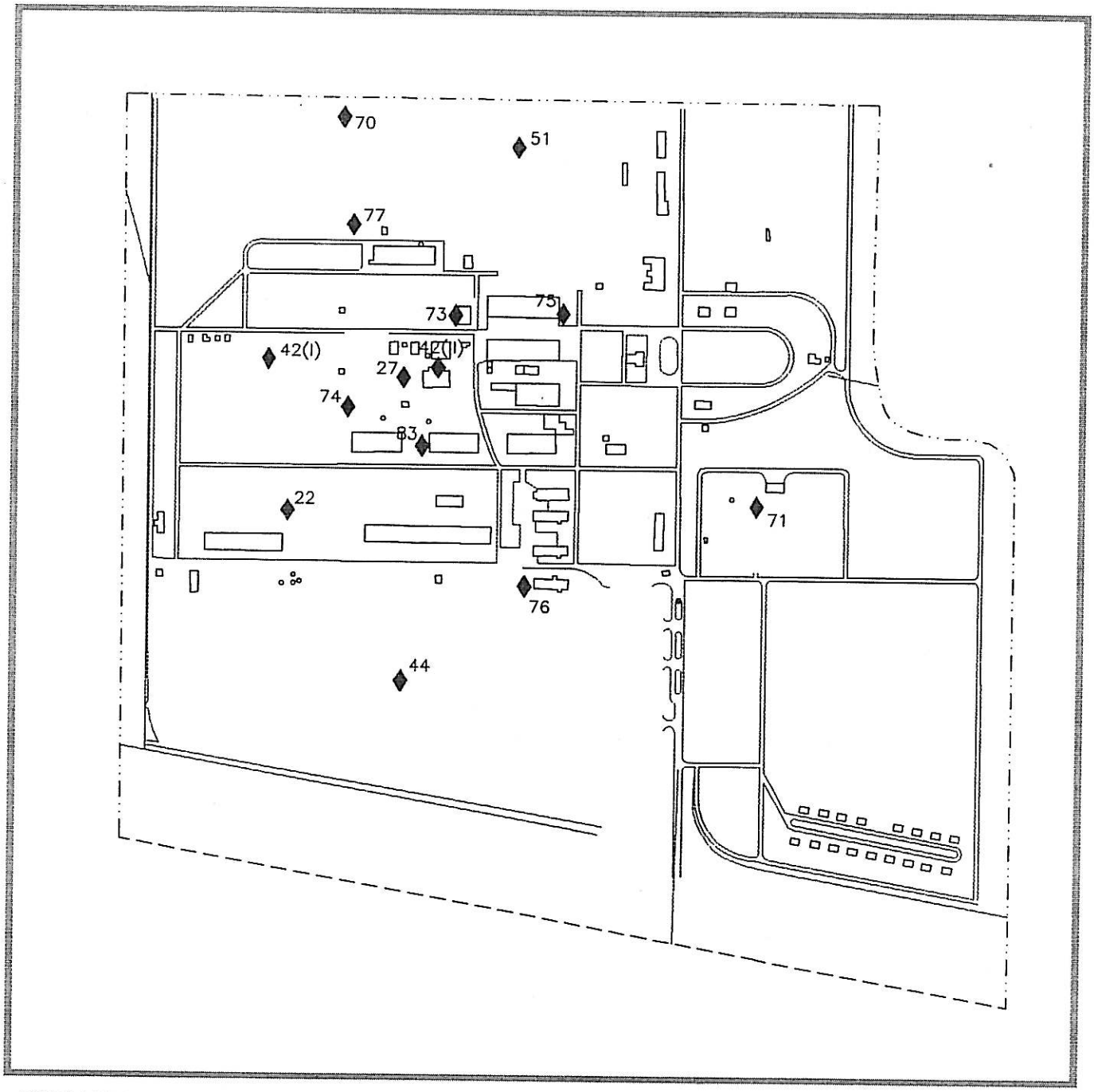
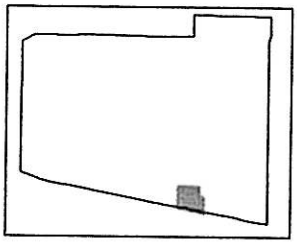


EXPLANATION

- Site
- OUs
- OU & Site
- Installation Boundary
- Administration Area Boundary

Note: The sites within OU–5 and OU–9 are located throughout the installation.



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Sites and OUs Currently Under Investigation in the Administration Area

Figure 3–1B

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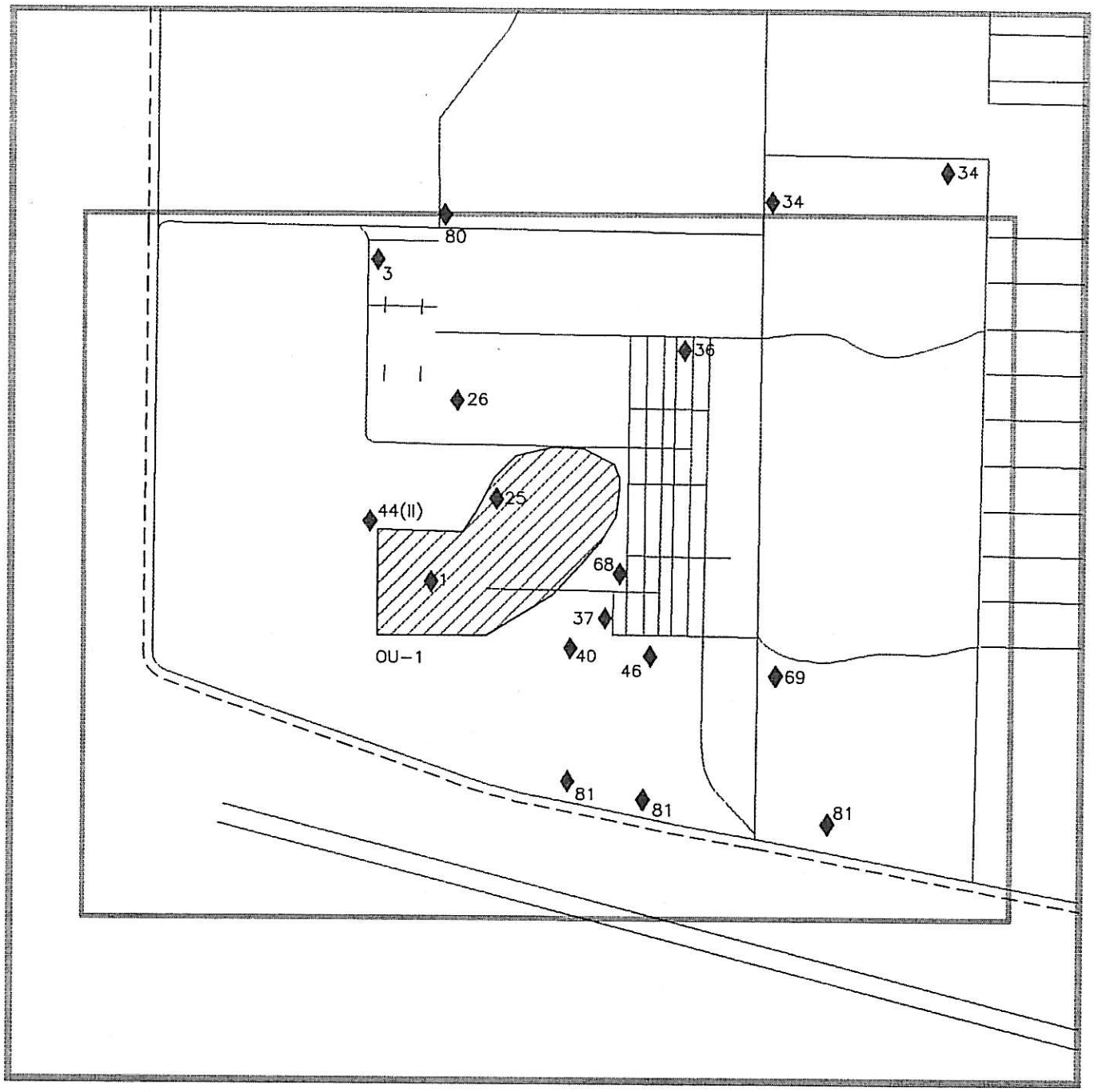
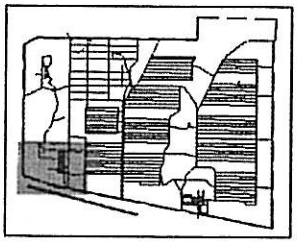


EXPLANATION

- Site
- OUs
- OU & Site
- Installation Boundary



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Sites and OUs Currently Under Investigation in the OU 1 Area

Figure 3-1C

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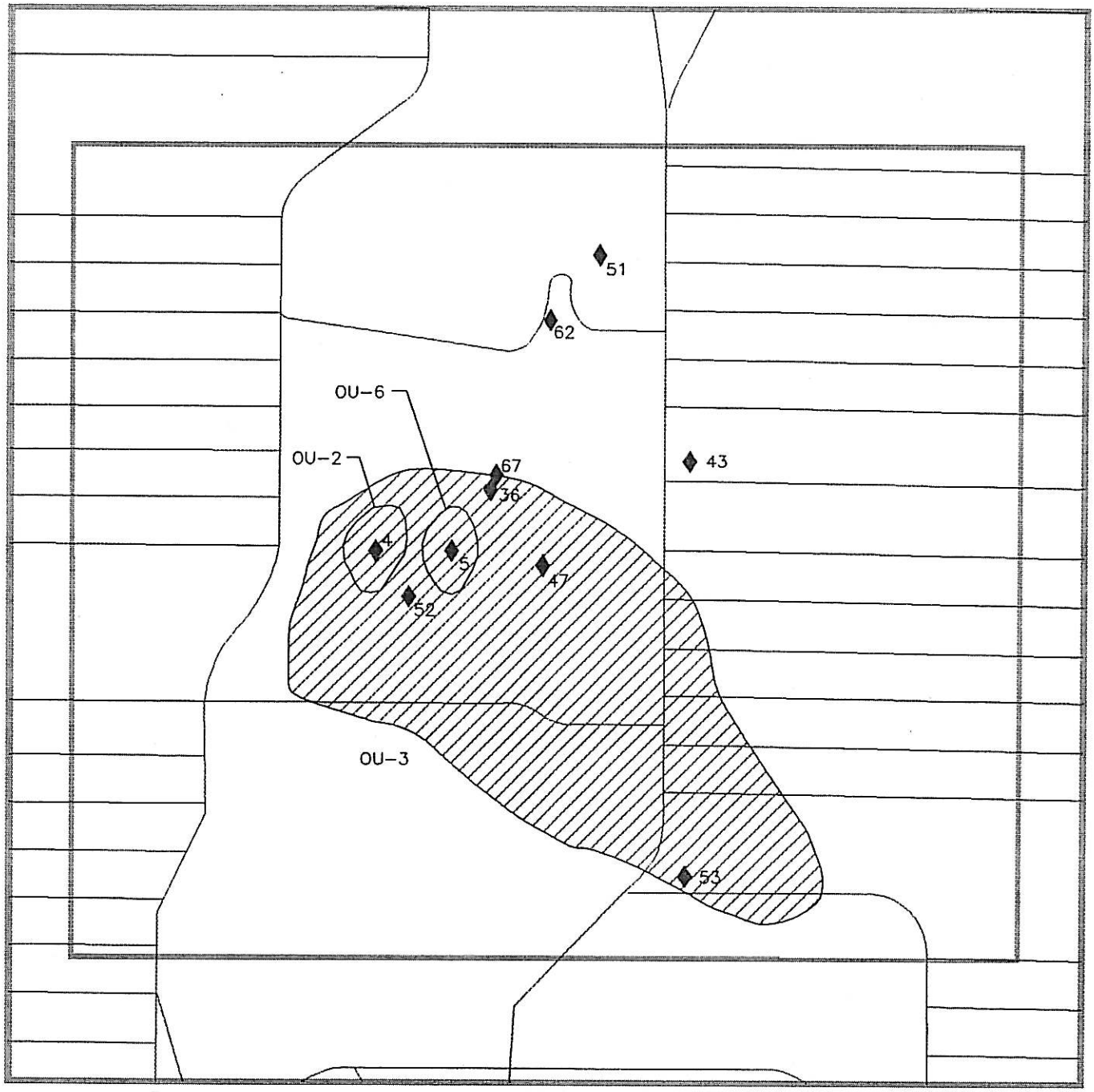
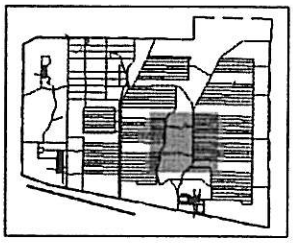


EXPLANATION

- Site
- OUs
- OU & Site



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Sites and OUs Currently Under Investigation in the OU 3 Area

Figure 3-1D

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3.1.2 Installation-Wide Source Discovery and Assessment Status

A number of installation-wide assessments have been conducted to identify the presence of contamination sources at UMDA. These include the IIA completed in 1978, the RFA completed in 1987, the ENPA completed in 1990, and the RI/FS SRI completed in 1992. The most recent installation-wide investigation conducted at UMDA was a CERFA investigation which was completed in April 1994. Several other installation-wide surveys which are related to environmental compliance programs have also been conducted at UMDA. These include two asbestos surveys and two radon surveys. In total, over 82 sites have been evaluated.

Bottom-up Reviews conducted by the BCT as part of the BCP preparation process have not revealed any additional areas requiring environmental evaluation (AREEs). Should any new AREEs be identified, they will be addressed according to the strategy described in Chapter 4.

3.2 Compliance Program Status

Compliance activities at UMDA are being conducted in coordination with environmental restoration activities under the IRP. General compliance activities address the management of USTs, hazardous substances, asbestos, radon and PCBs. Compliance-related RAs at UMDA include removal of USTs, removal of PCB transformers, removal of friable asbestos, and radon mitigation.

The statutory basis for IRP activities at UMDA is CERCLA. Compliance related management and restoration activities are differentiated from CERCLA actions because they are regulated primarily under other statutes. These statutes include RCRA Subtitles C, D, and I, the Clean Water Act, Clean Air Act, Toxic Substances Control Act, NEPA, and various National Regulatory Commission (NRC) laws and regulations.

Compliance actions at UMDA can be divided into two separate categories, current mission- and operational-related compliance projects, and closure-related compliance projects. Mission- and operational-related projects are those which have been or would be conducted for the normal operation of the installation and are unrelated to activities necessitated by installation realignment under BRAC. Conversely, closure-related compliance projects are those conducted specifically as a result of environmental compliance and restoration activities related to BRAC closure/realignment and property disposal. The various environmental compliance projects at UMDA are identified by mission-related and closure-related compliance categories on Tables 3-3 and 3-4, respectively.

A major element in the UMDA environmental restoration process is the execution of early actions. These early actions provide the means of removing contamination sources and reducing risks posed by releases while at the same time providing critical data for the development of comprehensive conceptual models of sources, migration pathways, and receptors. Early actions can also accelerate the availability of property for economic development. Compliance early actions at UMDA include UST, PCB transformer, and asbestos removal actions and radon screening. These actions are identified in Table 3-5. A more detailed description of the various environmental compliance programs at UMDA is provided in the subsections below.

TABLE 3-3. MISSION/OPERATIONAL-RELATED COMPLIANCE PROJECTS

Project	Status	Regulatory Program
Hazardous Waste Disposal	Ongoing as required. Hazardous materials and SPCC Plan maintained.	SARA Title III and Facilities Management Regulations
Worker Training	Training scheduled.	RCRA, SARA Title III and Facilities Management Regulations
Air Quality Permit	Facility boilers are only units currently permitted. Ammunition demolition in ADA as required under new mission will also require a permit.	State of Oregon Clean Air Quality Act Program
Solid Waste Disposal	Ongoing as required. Solid waste disposed of at offsite landfill.	State of Oregon Solid Waste Disposal Permit Program
Wastewater Discharge Management	Permit may be required for discharge from ammunition demolition in ADA Area as required under new mission.	State of Oregon Pollutant Discharge Elimination System Permit Program

TABLE 3-4. CLOSURE-RELATED COMPLIANCE PROJECTS

Project	Status	Regulatory Program
Depot-wide Asbestos Removal	Friable ACM identified in the asbestos survey removed in fall of 1994.	Clean Air Act/OSHA 29 CFR 1910.1001
Deactivation Furnace Soils OU	Remediation of lead-contaminated soil is ongoing and expected to be completed in FY 95 under IRP.	CERCLA/RCRA
Solid Waste Landfill	No longer excepting solid waste.	RCRA, Subtitle D
Lead-Based Paint	Paint survey of lead-based paint to be conducted in FY 1995.	AR 200-1 and the U.S. Army Policy Memorandum "Lead-based Paint and Asbestos in U.S. Properties affected by Base Closure and Realignment" 15 November 1993
ADA Area OU	Remediation is to begin under IRP once Draft ROD is signed.	CERCLA/RCRA
UST Management	Compliance activities are continuing.	RCRA, Subtitle I
Radon Testing	Completed.	AR 200-1, Chapter 11, U.S. Army Radon Radiation Program

TABLE 3-5. COMPLIANCE EARLY ACTION STATUS

Site	UST No.	Action	Purpose	Status
PCB Transformer Removal		All PCB regulated transformers removed and destroyed in accordance with TSCA	To remove potential PCB contamination sources	Removed and destroyed in accordance with 40 CFR 761
Asbestos Removal		All friable and damaged asbestos removed	To comply with DA Asbestos Regulations	Removed
Radon Mitigation		Conducted radon screening in accordance with the 1990 final USATHAMA SOP	To mitigate radon concentration above the USEPA radon levels in Building 1 and several igloos	Corrective action in accordance with USEPA guidance
Building 2	2	Removed	Tank Inactive	Removed
Building 18	5	Removed	Tank Inactive	Removed
Building 32	7	Removed	Tank Inactive	Removed
Building 38	34	Removed	Tank Inactive	Removed
Building 105	35	Removed	Tank Inactive	Removed
Building 106	36	Removed	Tank Inactive	Removed
Building 115	37	Removed	Tank Inactive	Removed
Building 117	38	Removed	Tank Inactive	Removed
Building 486	39	Removed	Tank Inactive	Removed
Building 130	40	Removed	Tank Inactive	Removed
Airfield	41	Removed	Tank Inactive	Removed
Site 23	44	Removed	Tank Inactive	Removed
Site 24	45	Removed	Tank Inactive	Removed
Building 24	46	Removed	Tank Inactive	Removed
Building 91	47	Removed	Tank Inactive	Removed
Building 135	48	Removed	Tank Inactive	Removed
Building 133	49	Removed	Tank Inactive	Removed
Building 133	50	Removed	Tank Inactive	Removed
Building 104	52	Removed	Tank Inactive	Removed
Building 448	53	Removed	Tank Inactive	Removed
Building 656	54	Removed	Tank Inactive	Removed
Building 617	55	Removed	Tank Inactive	Removed
Building 457	56	Removed	Tank Inactive	Removed
Building 419	57	Removed	Tank Inactive	Removed
Building 53	80	Removed	Tank Inactive	Removed
Building 52	87	Removed	Tank Inactive	Removed
Building 486	92	Removed	Tank Inactive	Removed
Airfield	96	Removed	Tank Inactive	Removed
Near Building 23	102	Removed	Tank Inactive	Removed

UMDA maintains a number of permits, licenses, notifications, and registrations with federal, state, and local agencies under the various installation environmental compliance programs. These include a permit for air emissions, a license for the use of radioactive source alarms, and notifications for UST and hazardous waste generator activities. Most of these permits, licenses, and notifications apply to mission-related operations, which will be discontinued at or before installation closure. However, several permits and licenses, such as air contaminant discharge permits for heating systems may be required by future property owners after property excess and disposal. It should be noted that, in addition to these permits, wastewater and air permits may be required for the future Chem Demil operation at the installation. The various permits and licenses held by UMDA are summarized by environmental compliance program in Table 3-6.

3.2.1 Storage Tanks

USTs and aboveground storage tanks (ASTs) have historically been utilized for the storage of petroleum products at UMDA. Compliance and environmental restoration activities related to these storage tanks are described in this section.

3.2.1.1 USTs. The USEPA has delegated the management of the UST program to the State of Oregon. The state has primary enforcement responsibility and USEPA's approval effectively suspends the applicability to certain federal regulations in favor of the state program, thereby eliminating duplicative requirements. Therefore, UST closure and investigation activities at UMDA are being conducted under the Oregon UST program.

A UST survey was conducted at UMDA in 1993. The investigation consisted of a site visit to each UST, compilation of UST data, collection of registration forms, and collection of installation data such as underground water tables, installation soils data, and UST locations.

Based on the findings of the investigation, a compliance plan was developed for each UST. This plan addresses the actions required, the costs involved, and the compliance dates required to bring each Defense Environmental Restoration Account (DERA)-eligible UST into compliance with the applicable provisions of the regulation. There are currently 36 active and inactive USTs at UMDA. At this time 29 USTs have been removed. Table 3-7 provides a current inventory of the USTs at UMDA.

3.2.1.2 ASTs. AST compliance programs at UMDA are conducted under U.S. Army Regulation (AR) 200-1, federal requirements including 40 CFR Parts 100, 112, and 116 and Oregon oil pollution prevention regulations.

There are currently 38 active ASTs at UMDA. Table 3-8 shows the location, size, and contents of these ASTs. These ASTs are managed in compliance with an installation Spill Prevention Control and Countermeasures (SPCC) Plan and applicable regulations.

3.2.2 Hazardous Substance Management

Activities at UMDA have involved the management of a variety of hazardous substances. These substances include solvents and petroleum products utilized at the motor pool and the battery

TABLE 3-6. ENVIRONMENTAL COMPLIANCE PERMITS, LICENSES, NOTIFICATIONS AND REGISTRATIONS

Compliance Program	Permit/License/Notification/ Registration No.	Description	Issuing Agency	Issue Date	Expiration Date	Comments
Storage Tanks	4767 (Registration #)	Underground Storage Facility Notification for USTs	ODEQ		NA	Notification requires update after change in any UST status.
Hazardous Materials/Waste Management	OR6213820917	Notification of Hazardous Waste Activity	USEPA/ODEQ	July 7, 1980	NA	Subsequent notification required by new owner using existing site-specific USEPA ID No.
NRC Licensing	12-00722-13	For Model M43A1 Chemical Agent Detectors (Army-wide license)	NRC			License for sealed radioactive sources within Chemical Agent Detectors. License to be terminated when sources are no longer required.
Air Emissions	25-0024	Air Contaminant Discharge Permit	ODEQ	Approximately 1974	Current	Sources covered under permit include: deactivation furnace (Site 1), space heating systems, and demilitarization of unserviceable ammunition by open air detonations (Site 16 and Site 32). Furnace has been closed and dismantled and open air detonations and propellant burning activities are not conducted at this time.

Key: NA = Not Applicable
ODEQ = Oregon Department of Environmental Quality
USEPA = U.S. Environmental Protection Agency
NRC = Nuclear Regulatory Commission

TABLE 3-7. UNDERGROUND STORAGE TANK INVENTORY

Tank No.	Site No. Reuse Parcel	Location	Year Installed	Capacity (Gallons)	Substance Stored	Status	Comments	Future Actions
1	S	Bldg. 1	1945	1,000	DF2	Active	None	Upgrade in FY
2	R	Bldg. 2	1945	1,000	DF2	Removed	None	None
3	O	Bldg. 7	1945	1,000	DF2	Active	None	Upgrade in FY 95
4	O	Bldg. 10	1945	1,000	DF2	Active	None	Upgrade in FY 95
5/83	O	Bldg. 18	1945	1,000	DF2	Removed	None	None
6	O	Bldg. 30	1945	1,000	DF2	Active	None	Upgrade in FY 95
7	R	Bldg. 32	1945	1,000	DF2	Removed	None	None
8	R	Bldg. 38	1945	1,000	DF2	Active	None	Upgrade in FY 95
9	M	Bldg. 416	1945	3,000	DF2	Active	None	Removal in FY 95
10	M	Bldg. 419	1945	1,002	DF2	Active	None	Upgrade in FY 95
11	I	Bldg. 612	1945	15,194	HT5	Active	None	Removal in FY 95
12	I	Bldg. 617	1945	2,500	DF2	Active	None	Removal in FY 95
13	B	Bldg. 208	1945	1,001	DF2	Active	None	Removal in FY 95
14	F	Bldg. 622	1965	1,000	DF2	Active	None	Removal in FY 95
15	H	Bldg. 654	1982	4,000	DF2	Active	None	Upgrade in FY 95
16	H	Bldg. 655	1982	6,000	DF2	Active	None	Upgrade in FY 95
17	H	Bldg. 660	1965	10,310	DF2	Active	None	Upgrade in FY 95
18	O	Bldg. 28	1945	15,194	HT5	Active	None	Upgrade in FY 95
19	O	Bldg. 28	1945	8,000	HT5	Active	None	Upgrade in FY 95
20	O	Bldg. 37	1945	10,529	HT5	Active	None	Removal in FY 95
21	O	Bldg. 31	1945	15,194	HT5	Active	None	Removal in FY 95
22	O	Bldg. 31	1945	12,088	HT5	Active	None	Removal in FY 95
23	O	Bldg. 31	1945	12,088	HT5	Active	None	Removal in FY 95
24	B	Bldg. 131	1945	15,194	HT5	Active	None	Removal in FY 95
25	L	Bldg. 433	1945	15,194	HT5	Active	None	Removal in FY 95
26	R	Bldg. 15A	1945	675	DF2	Active	None	Upgrade in FY 95
27	R	Bldg. 15B	1945	675	DF2	Active	None	Upgrade in FY 95
28	R	Bldg. 16A	1945	675	DF2	Active	None	Upgrade in FY 95
29	R	Bldg. 16B	1945	675	DF2	Active	None	Upgrade in FY 95
30	R	Bldg. 35	1945	376	DF2	Active	None	Upgrade in FY 95
31	R	Bldg. 55	1945	1,000	DF2	Active	None	Upgrade in FY 95
32	B	Bldg. 116	1945	1,000	DF2	Active	None	Removal in FY 95
33	B	Bldg. 129	1945	1,000	DF2	Active	None	Removal in FY 95
34	R	Bldg. 38	1945	1,000	DF2	Removed	None	None

TABLE 3-7. UNDERGROUND STORAGE TANK INVENTORY

Continued

Tank No.	Site No. Reuse Parcel	Location	Year Installed	Capacity (Gallons)	Substance Stored	Status	Comments	Future Actions
35	B	Bldg. 105	1945	1,000	DF2	Removed	None	None
36	B	Bldg. 106	1945	10,310	DF2	Removed	None	None
37	B	Bldg. 115	1945	10,310	HT5	Removed	None	None
38	B	Bldg. 117	1945	10,310	HT5	Removed	None	None
39	M	Bldg. 486	1945	25,049	HT5	Removed	None	None
40	B	Bldg. 130	1945	1,000	DF2	Removed	None	None
41	I	Airfield	1945	10,310	Gasoline	Removed	None	None
42	O	Fuel Yard	1984	50,750	Gasoline	Active	None	Upgrade as necessary
43	O	Fuel Yard	1984	50,750	DF2	Active	None	Upgrade as necessary
44	O	Bldg. 5	1948	500	Waste Oil	Removed	None	None
45	O	Bldg. 9/10	1942	500	Waste Oil	Removed	None	None
46	O	Bldg. 24	1941	140	Gasoline	Removed	None	None
47	B	Bldg. 91/160	1950	110	Gasoline	Removed	None	None
48	B	Bldg. 135	1948	110	Gasoline	Removed	None	None
49	B	Bldg. 133	1946	110	Gasoline	Removed	None	None
50	B	Bldg. 133	1943	110	Gasoline	Removed	None	None
51	O	Bldg. 51	1945	1,000	DF2	Active	None	Upgrade in FY 95
52	B	Bldg. 104	1945	1,000	DF2	Removed	None	None
53	M	Bldg. 448/Wildlife Station	1945	1,000	DF2	Removed	None	None
54	H	Bldg. 656	1984	Unknown	Chemical Decon	Removed	None	None
55	I	Bldg. 617	1985	Unknown	Gasoline or DF2	Removed	None	None
56	E	Bldg. 457	1950	Unknown	Gasoline or DF2	Removed	None	None
57	M	Bldg. 419	1945	Unknown	DF2	Removed	None	None
58/95	H	Bldg. 654	1982	Unknown	Chemical Decon	Active	None	Upgrade in FY 95
59	L	Site 43; Old Fuel Yard	1945	3,000	Gasoline or DF2	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
60	L	Site 43; Old Fuel Yard	1945	3,000	Gasoline or DF2	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None

TABLE 3-7. UNDERGROUND STORAGE TANK INVENTORY

Continued

Tank No.	Site No. Reuse Parcel	Location	Year Installed	Capacity (Gallons)	Substance Stored	Status	Comments	Future Actions
61	L	Site 43; Old Fuel Yard	1945	3,000	Gasoline or DF2	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
62	L	Site 43; Old Fuel Yard	1945	3,000	Gasoline or DF2	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
63	O	Bldg. 27	1980s	500	Battery Acid	Active	Treatment tank	None
64	O	Bldg. 84	Unknown	900	Diesel fuel	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
65	O	Site 42E; Building 6	Unknown	800	Diesel fuel	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
66	O	Site 42E; Building 6	1950s	550	Gasoline	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
67	O	Site 42E; Building 6	1950s	10,000	Gasoline	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
68	O	Site 42E; Building 6	1950s	8,000	Gasoline	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None

TABLE 3-7. UNDERGROUND STORAGE TANK INVENTORY

Continued

Tank No.	Site No. Reuse Parcel	Location	Year Installed	Capacity (Gallons)	Substance Stored	Status	Comments	Future Actions
69	O	Site 42E; Building 6	1950s	25,000	Gasoline	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
70	O	Site 42W; N of 23	1950s	26,000	DF2	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
71	O	Site 42W; N of 23	1950s	11,150	DF2	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
72	O	Site 42W; N of 23	1950s	11,275	DF2	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
73	O	Site 42W; N of 23	1950s	24,950	DF2	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
74	O	Site 42W; N of 23	1950s	5,104	Stove Oil	Inactive	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
75	O	Site 42W; N of 23	1950s	4,011	Stove Oil	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None

TABLE 3-7. UNDERGROUND STORAGE TANK INVENTORY

Continued

Tank No.	Site No. Reuse Parcel	Location	Year Installed	Capacity (Gallons)	Substance Stored	Status	Comments	Future Actions
76	O	SE of 77	1950s	600	Diesel fuel	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
77	O	SW of 77	1950s	800	Light Oil	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
78	O	Bldg. 28	1950s	500	Boiler Blowdown	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; Boiler blowdown area.	None
79	O	Bldg. 54	1950s	1,000	HT5	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
80	O	Bldg. 53	1950s	1,000	HT5	Removed	None	None
81	O	Bldg. 52	1950s	1,000	HT5	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
82	O	Bldg. 36	1950s	800	HT5	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
83	O	Bldg. 18	1950s	1,000	DF2	Not Confirmed	No such tank, according to base personnel	None

TABLE 3-7. UNDERGROUND STORAGE TANK INVENTORY

Continued

Tank No.	Site No. Reuse Parcel	Location	Year Installed	Capacity (Gallons)	Substance Stored	Status	Comments	Future Actions
84	O	Bldg. 5	1950s	3,000	DF2	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
85	O	Bldg. 31	1950s	Unknown	Condensation Tank	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
86	R	F24	1950s	3,000	HT5	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
87	O	52/206	1950s	1,000	DF2	Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
88	E	Supply House 3	1950s	500	DF2	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
89	E	Supply House 3	1950s	500	DF2	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
90	E	Supply House 3	1950s	500	DF2	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None

TABLE 3-7. UNDERGROUND STORAGE TANK INVENTORY

Continued

Tank No.	Site No. Reuse Parcel	Location	Year Installed	Capacity (Gallons)	Substance Stored	Status	Comments	Future Actions
91	M	--	1950s	250	DF2	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None
92	M	486	1950s	Unknown	Likely DF2	Removed		None
93	M	E of 486	1950s	600	Water	Inactive		Removal in FY 95
94	L	433	1950s	500	Boiler Blowdown	Inactive		Removal in FY 95
95	H	654	1960s	Unknown	Chemical Decon	Active		Upgrade in FY 95
96	I	Airfield	Unknown	Unknown	Water	Removed		None
97	L	433	Unknown	30-59	Unknown (empty)	Inactive		Removal in FY 95
98	M	486	Unknown	Unknown	Unknown (dry)	Inactive		Removal in FY 95
99	B	113	Unknown	Unknown	Unknown	Not Confirmed	No UST confirmed at this location	None
100	O	Bldg. 29	Unknown	Unknown	DF2	Not Confirmed	No UST confirmed at this location	None
101	M	Bldg. 419	Unknown	Unknown	Oil	Not Confirmed	No UST confirmed at this location	None
102	Unknown	Unknown	Unknown	12,000	DF2	Removed		None
Site 74, Oil/Fuel Transfer Station	O	Bldg. 23	Unknown	N/A	Gasoline or DF2	Unconfirmed/ Possibly Removed	No UST confirmed at this location during UST geophysical survey; UST was possibly removed.	None

Key:
DF2 = Diesel Fuel #2
HT5 = Heating Oil #5
Chemical Decon = Chemical Decontamination Solution

TABLE 3-8. ABOVEGROUND STORAGE TANK INVENTORY

Tank No.	Site No. Reuse Parcel	Location	Year Installed	Capacity (Gallons)	Substance Stored	Status	Comments	Future Actions
A2-1	S	Building 2		1,000	Diesel	Active	None	None
A5-1	O	Building 5		280	OE 30 Oil	Active	None	None
A5-2	O	Building 5		250	Diesel	Active	None	None
A18-1	O	Building 18		285	Diesel	Active	None	None
A18-2	O	Building 18		285	Diesel	Active	None	None
A24-1	O	Building 24		20	Gasoline	Active	None	None
A24-2	R	Building 24		50	Propane	Active	None	None
A27-1	O	Building 27		500	Propane	Active	None	None
A27-2	O	Building 27		500	Propane	Active	None	None
A28-1	O	Building 28		1,000	Propane	Active	None	None
A37-1	O	Building 37		1,000	Propane	Active	None	None
A52-1	O	Building 52		500	Propane	Active	None	None
A58-1	O	Building 58		285	Diesel	Active	None	None
A419-1	M	Building 419		1,000	Propane	Active	None	None
A422-1	M	Building 422		285	Diesel	Active	None	None
A433-1	L	Building 433		500	Propane	Active	None	None
A612-1	G	Building 612		500	Propane	Active	None	None
A621-1	A	Building 621		500	Propane	Active	None	None
A653-1	H	Building 653		285	Diesel	Active	None	None
APY-1	O	POL Yard		500	Propane	Active	None	None
APY-2	O	POL Yard		1,000	Propane	Active	None	None
A501-1	R	5th Avenue Housing		285	Diesel	Active	None	None
A502-1	R	5th Avenue Housing		285	Diesel	Active	None	None
A503-1	R	5th Avenue Housing		285	Diesel	Active	None	None

TABLE 3-8. ABOVEGROUND STORAGE TANK INVENTORY

Continued

Tank No.	Site No. Reuse Parcel	Location	Year Installed	Capacity (Gallons)	Substance Stored	Status	Comments	Future Actions
A504-1	R	5th Avenue Housing		285	Diesel	Active	None	None
A505-1	R	5th Avenue Housing		285	Diesel	Active	None	None
A506-1	R	5th Avenue Housing		285	Diesel	Active	None	None
A507-1	R	5th Avenue Housing		285	Diesel	Active	None	None
A508-1	R	5th Avenue Housing		285	Diesel	Active	None	None
A509-1	R	5th Avenue Housing		285	Diesel	Active	None	None
A510-1	R	5th Avenue Housing		285	Diesel	Active	None	None
A511-1	R	5th Avenue Housing		285	Diesel	Active	None	None
A512-1	R	5th Avenue Housing		285	Diesel	Active	None	None
A513-1	R	5th Avenue Housing		285	Diesel	Active	None	None
A514-1	R	5th Avenue Housing		285	Diesel	Active	None	None
A515-1	R	5th Avenue Housing		285	Diesel	Active	None	None
A516-1	R	5th Avenue Housing		285	Diesel	Active	None	None
A517-1	R	5th Avenue Housing		285	Diesel	Active	None	None

acid at the Battery Recharging Building, pesticides stored and handled around Building 8, and paints and solvents used in paint shops. Small amounts of other miscellaneous hazardous substances such as boiler treatment chemicals, groundskeeping chemicals, and janitorial supplies have also been utilized at the installation. Red fuming nitric acid, aniline, explosives, propellants, solvents and paints were also used in munitions renovation operations at the Depot.

Hazardous substances currently present at UMDA are managed in compliance with federal requirements outlined in the Emergency Planning and Community Right-to-Know Act (EPCRA), Executive Order 12385, the SPCC requirements in 40 CFR Parts 110 and 112, ODEQ regulations, AR 200-1 and other applicable federal, state, and local regulations.

Hazardous substance surveys of the installation were completed during EnPA and CERFA investigations. There are no extremely hazardous substances as specified in the SARA, Title II, Section 302 present at the installation. UMDA does not maintain or utilize sufficient quantities of hazardous chemicals to require reporting under SARA Title III, Section 312 (Tier reporting), or SARA Title III, Section 313 (Toxic Chemical Release Form R reporting). Obsolete M-55 rockets that have been declared hazardous waste by the U.S. Army. These obsolete munitions will be disposed of properly when the U.S. Army has determined the proper detonation or destruction procedures.

The installation maintains Material Safety Data Sheets (MSDSs) as required by Occupational Safety and Health Administration (OSHA) for all hazardous chemicals on the installation, and spill response equipment is present at UMDA. Hazardous substances notifications have been submitted to local emergency response agencies and spill response has been coordinated with the UMDA Fire Department located on the installation.

Pesticide storage and handling at UMDA is conducted in compliance with TSCA regulations. Storage facilities with secondary containment are utilized, and washwaters are collected and properly disposed by an off-site vendor.

Use and storage of hazardous substances has significantly decreased since munition renovation was discontinued and the Depot has undergone realignment and tenant activities have been discontinued. UMDA has an ongoing close-out survey program established for installation facilities being vacated by U.S. Army components and tenants. Hazardous substances found abandoned during these close-out surveys are identified and arrangements are made for the proper disposal of the substances in compliance with regulatory requirements.

3.2.3 Hazardous Waste Management

Hazardous waste compliance programs at UMDA are conducted under AR 200-1, the federal requirements found in 40 CFR 260 through 269, 40 CFR 117, 49 CFR 171 et seq., DOT regulations, and Oregon Administrative Rules, Chapter 340, Division 100-120.

UMDA finalized an installation Hazardous Waste Management Plan in September 1992. There are currently four hazardous waste accumulation points and one RCRA Part B permitted storage facility, which is Building 203 located at UMDA. Accumulation points at the installation consist

of 55-gallon drums used to store various associated hazardous wastes. Storage at the accumulation points is temporary and does not exceed 90 days from the time the waste begins to accumulate. Once full, the drums are transported to Building 203. Hazardous waste is transported off-site by a licensed hazardous waste hauler and disposed of in a licensed hazardous waste facility.

Routine historical operations involving the handling of hazardous substances and wastes at UMDA has resulted in some localized soil and groundwater contamination. This contamination is being fully addressed through the installation environmental restoration program. In general, waste generated from IRP associated activities and other on-site contractor operations is removed and properly disposed via the contractor's own subcontracted waste hauler. Solidified soil contaminated with heavy metals is placed in the active landfill at UMDA. This landfill no longer excepts solid waste.

3.2.4 Solid Waste Management

Solid waste management compliance programs at UMDA are conducted under AR 200-1 and 420-47, and the federal requirements found in 40 CFR 240-246 and 40 CFR 257-258, DOT regulations and State of Oregon solid waste laws and regulations.

Solid waste generated by UMDA is currently transported off-post for disposal at a local landfill. The existing Depot active landfill (Site 11) is receiving only treated soils from on-going remedial activities associated with the Deactivation Furnace Soils (OU 1). The landfill will continue to accept the treated soils until the remediation activities at the OUs are complete.

Five inactive landfills (OU 8) are located on the Depot. A "No Action" ROD has been signed for the inactive landfills OU.

3.2.5 Polychlorinated Biphenyls (PCBs)

PCB management compliance programs at UMDA are conducted under AR 200-1 and the federal requirements found in 40 CFR 761, DOT regulations, and State of Oregon PCB regulations.

All transformers and capacitors currently in service at UMDA contain less than 50 parts per million (ppm) PCBs. An installation-wide remedial program was initiated in 1989 to remove or retrofit all PCB transformers or PCB-contaminated transformers and capacitors. A total of 66 transformers have been removed and disposed of off-post in accordance with regulatory requirements. Transformers were stored in Building 70 prior to being shipped off-site. Of the 66 transformers removed from the Depot, 50 have been replaced by new units containing less than 50 ppm PCBs.

Under the DD for OU 9, soil in the sump at the concrete vault at transformer location no. 229, which contained 3.8 ppm of PCB 1260, will be cleaned out and disposed of as a removal action. This PCB level does not exceed USEPA's cleanup criterion. The small amount of contaminated

soil will be removed as a feasible and cost-effective means to comply with the State of Oregon's background level rule.

3.2.6 Asbestos

Asbestos-containing material (ACM) is regulated by USEPA, OSHA, and the State of Oregon. Asbestos at UMDA is also being managed in compliance with the U.S. Army guidance "Lead-Based Paint and Asbestos in U.S. Army Properties Affected by Base Realignment and Closure."

An Asbestos Identification Survey was performed in 1988, by the Walla Walla District of the USACE. Approximately 200 buildings were surveyed. The building survey report details building data, recommendations, cost estimates for recommended actions, and a hazard ranking of perceived asbestos hazards. Following this survey, asbestos removal was conducted in some buildings.

A Preliminary Asbestos Survey for the installation was conducted in 1990, with the final Asbestos Assessment Survey Report being completed in 1992. This second survey was completed to support of the BRAC program of UMDA. During this survey, 285 buildings were surveyed, 121 were found to contain asbestos, and asbestos removal was recommended for 58 buildings. The survey did not include the storage igloos in Blocks A through K. Asbestos abatement for the 58 buildings was completed in 1994.

3.2.7 Radon

The radon reduction program at UMDA is conducted under AR 200-1, Chapter 11, U.S. Army Radon Reduction Program.

Radon screening at UMDA took place in two phases. Phase I was a 12-month survey conducted in 1991 and Phase II was a 90-day survey conducted in 1992-1993. The 1991 radon survey, as conducted, was considered to be limited in scope and therefore, was a screening tool rather than a comprehensive survey. The results of the 1991 radon survey are as follows: 120 buildings had no radon gas concentrations exceeding the detection limit of 0.5 picoCuries per liter (pCi/L); radon gas concentrations in 38 buildings ranged from 0.6 to 1.8 pCi/L (less than the USEPA-recommended value of 4.0 pCi/L); and Buildings 1 and 5 tested equal to or greater than the USEPA-recommended level of 4.0 pCi/L. No sampling results were available for Buildings 131, 131-A1, 135, 431, and 605.

The 1993 radon survey was conducted to provide follow-up screening and to provide the following additional tasks in 97 UMDA buildings and structures; re-survey Buildings 122, 130, 131, 131-A1, 135, 409, 415, 431, and 605; re-survey Building 1 basement; survey 10 percent of Blocks A through H, and J storage igloos; resurvey Building 489 and 619; and conduct a survey of Buildings 653, 654, 655, and 656 of K Block. A total of 97 separate buildings or structures were sampled during the 1993 survey including five buildings which were surveyed in 1991. The results of the 1993 radon survey are as follows: 97 buildings were screened; Building 656 had no radon concentrations exceeding the detection limit of 0.5 pCi/L; 84 buildings had detections ranging between 0.5 to 3.8 pCi/L; and seven igloos had radon

concentrations greater than 4.0 pCi/L. The results of the five buildings that had been resurveyed during this 1993 survey are as follows: the mail room of Building 1 had a 9.8 pCi/L level; and Buildings 122, 130, 409, and 415 all had radon concentrations between <0.5 to 1.1 pCi/L.

To date, no mitigation for the seven igloos with readings above 4.0 pCi/L has been implemented. The strategies for addressing radon in these structures is described in Section 4.2.7.

3.2.8 RCRA Facilities (SWMUs)

RCRA facilities and SWMUs at UMDA are managed under the installation hazardous waste management program in accordance with AR 200-1, Chapter 6, DoD Directives, RCRA Subtitle C; and State of Oregon hazardous waste regulations.

A RFA was conducted at UMDA in June 1987. The RFA identified 30 SWMUs. Five of the SWMUs were investigated as OUs in the installation RI and have RODs associated with them: the Deactivation Furnace (SWMU #1 or Site 1, OU 1), the Active Landfill (SWMU #11 or Site 11, OU 7), the Inactive Landfills (SWMU #12 or Site 12, OU 8), the Explosives Washout Lagoons (SWMU #4 or Site 4, OU 2), and the Explosive Washout Plant (SWMU #5 or Site 5, OU 6). Seventeen SWMUs are part of two other OUs investigated during the RI at UMDA: the ADA Area (OU 4) and the Miscellaneous Sites (OU 5) and are included in the associated OU RODs. The remaining eight SWMUs were studied under the installation RI and the SRI and were determined to have no risk. Remedial activities have been completed at the Deactivation Furnace OU and are underway at the Explosives Washout Lagoons Soils OU. Remedial activities are scheduled to begin in July 1995 at the Explosive Washout Plant OU, the ADA Area OU, at the Miscellaneous Sites OU, and the Explosive Washout Lagoon Groundwater OU.

Currently, Building 203 is operating as a RCRA Part B permitted storage facility, which does not require permitting under the RCRA program. The Open Detonation Pits (Site 16) and the Open Burning Trays (Site 32 I and II) are thermal treatment units as defined by RCRA. These sites were operating under RCRA Part B interim status during the Depot's realignment. They are no longer operational. The chemical agent deactivation incinerator will be part of UMDA's new mission when it is constructed and will require a RCRA Part B Subpart X permit. USEPA Region X and the State of Oregon are reviewing a RCRA Part B application that has been submitted for the planned incinerator.

3.2.9 Wastewater Discharges

Wastewater discharges from UMDA consist of sanitary wastewater discharged to a tile leaching field. This discharge does not require an NPDES permit. UMDA does not have any NPDES permits for any former industrial wastewater discharges to the tile leaching field, the Explosives Washout Lagoons or other discharges associated with its previous missions.

3.2.10 Oil/Water Separators

There is one oil/water separator at UMDA. The separator formerly collected rinsewater from two vehicle wash racks at Building 5 and discharged the rinsewater to the Depot's tile leaching field. The oil collection sump is pumped out by a contractor and disposed of off-site. This oil/water separator is managed under the installation's SPCC program, in accordance with applicable federal regulations including Section 313(a) of the Clean Water Act and regulations 40 CFR Parts 110, 112, and 122. This oil/water separator is currently non-operational and there are no plans to repair the unit.

3.2.11 Pollution Prevention

Pollution prevention at UMDA is managed through the installation hazardous waste management program in accordance with AR 200-1, Chapter 6, and applicable federal and state regulatory requirements. UMDA recycles used oil and batteries. Solid waste, including cans, cardboard, and white paper are also recycled.

3.2.12 NRC Licensing

There is a U.S. Army-wide NRC Materials License, Number 12-00722-13, for Model M43A1 Chemical Agent Detectors used in the detection of aerosols and gases associated with chemical munitions. UMDA is included in this license under the docket or reference number 030-21073, Amendment No. 14. There are approximately 50 of these detectors or alarms at UMDA. The chemical agent detectors contain Americium-241 in a sealed cell. No alarm exceeds 300 microcuries or 25 curies total. These alarms are stored in Building 656 and used to inspect the K Block igloos where the chemical agents are stored. The alarms are stored and used in compliance with NRC license requirements.

3.2.13 Mixed Waste

There is no mixed waste generated at UMDA.

3.2.14 Radiation

There is no radioactive waste generated at UMDA. Radioactive source materials at UMDA are limited to 50 chemical agent detectors stored in Building 656 (see Section 3.2.12).

3.2.15 Lead-based Paint

The UMDA lead-based paint management program is conducted in accordance with U.S. Department of Housing and Urban Development (HUD) guidelines for lead-based paint protection and the DA guidance "Lead-based Paint and Asbestos in U.S. Army Properties Affected by Base Realignment and Closure", dated June 1993.

A lead-based paint survey at UMDA is currently planned for FY 1995. In lieu of quantitative data for the CERFA investigation, lead-based paint was assumed to be present in all Depot

buildings constructed prior to 1978. Based on this age-based analysis, 184 buildings were determined to contain lead-based paint. The 1,001 igloos at UMDA are not painted.

3.2.16 Medical Waste

A small quantity of medical waste is generated at the UMDA Occupational Health Clinic. This waste is containerized and transferred to Fort Lewis, Washington where the medical unit is headquartered for handling and disposal. No medical waste has been landfilled at UMDA.

3.2.17 Unexploded Ordnance (UXO)

The ADA Area and the QA Function Range have been identified as the only locations where UXO may be present on UMDA. The ADA Area is a 1,716-acre area in the northwest corner of the Depot and the QA Function Range is in the northeast corner of the Depot. These areas were identified as possible UXO areas in the ENPA, RI/FS, and CERFA investigations.

3.2.18 NEPA

UMDA was included in the Final BRAC Realignment and Closure EIS, dated August 1991, for Fort Wingate Depot Activity, Navajo Depot Activity, and Hawthorne Army Ammunition Plant. The Disposal/Reuse EIS for the installation will be initiated by the U.S. Army Materiel Command during Fiscal Year 1995.

3.2.19 Air Emissions

UMDA operated the small arms deactivation furnace (Site 1, OU 1), the open detonation pits (Site 1, OU 4) and the open burning trays (Site 32, OU 4) under Oregon's Air Contaminant Discharge Permit Number 25-0024. This permit also covers three residual oil boilers greater than 750,000 British Thermal Units (BTU) per hour and fifty smaller boilers of less than 750,000 BTU per hour. At this time, only the boilers are covered under this permit, because the small arms deactivation furnace has been dismantled and the open burning detonation pits and open burning trays are no longer operational. The boilers are operated in compliance with permit requirements.

3.3 Status of Natural and Cultural Resource Programs

This section describes the current status of the natural and cultural resource program established at UMDA including identification and management of vegetation, wildlife, wetlands, and other preservation areas; rare, threatened and endangered species; and cultural resources. Natural and cultural resources at UMDA are managed in accordance with AR 420-74 and 420-40, DoD Directive 4700.4 and 4710.1, and applicable federal and state regulations and statutes.

3.3.1 Vegetation

The vegetation present at UMDA was documented in an ecological assessment report, which was part of the baseline risk assessment for UMDA. The majority of the installation with the

exception of the Administration Area has naturally occurring grass vegetation. The predominant vegetation at the Depot is drought-adapted steppe and shrub-steppe types, mainly sagebrush and bunchgrass communities, of the Upper Sonoran Biotic Zone. Approximately 95 percent of the Depot has these drought-adapted species. The native plant community on the western half of the Depot includes needle and thread grass, Sandberg bluegrass, antelope bitterbrush, big sagebrush and other perennial forbs and grasses. On the eastern portion of the Depot, many of the same native plant communities are found, including needle and thread grass, antelope bitterbrush, sagebrush and Sandberg bluegrass. Bluebunch wheatgrass, grey rabbitbrush and Indian ricegrass are found in smaller numbers.

There are six distinct stands of Bitterbrush *(Purshia tridentate)* on the Depot. This species is of significant interest because it has all but disappeared from the semi-arid region in which the Depot is located, due to the intensive agricultural use of the surrounding land. Russian thistle and cheatgrass are introduced species which are found in smaller numbers on the Depot.

The vegetation within the Administration Area is composed of ornamentals which are manicured and maintained. There is no vegetation management beyond the Administration Area, with the exception of a pronghorn antelope grazing program associated with an antelope herd maintenance plan. The antelope herd, managed by the Oregon Department of the Fish and Wildlife, graze over the entire Depot except the Administrative Area and the ADA Area.

3.3.2 Wildlife

The wildlife present at UMDA was documented in an ecological assessment report, which was part of the baseline risk assessment conducted for UMDA. Wildlife occurring at the Depot includes numerous species associated with grassland and shrub-steppe environments including several that are listed as sensitive as defined by state and federal governments. These species are described in Section 3.3.5. Pronghorn antelope which were introduced to the confines of the Depot in 1969, are often seen roaming the area. Other mammals which are common to the region include the badger, black-tailed jackrabbit, coyote, Washington ground squirrel, pocket gopher, and several species of small rodents.

The Depot also includes a representative portion of bird species found in the region. Many make use of the installation as year-round residents and others as spring and summer residents and migratory visitors. Because of the lack of surface water on the Depot (there are no lakes or streams) no water fowl are found on the installation property.

UMDA has no wildlife management plan. The Oregon Department of Fish and Wildlife manages the antelope herd at the Depot. The management includes control of the herd so that the antelope are excluded from the Administration Area and the ADA Area.

3.3.3 Wetlands and Floodplains

There are no wetlands or floodplains on UMDA.

3.3.4 Designated Preservation Areas

UMDA is not located on any formally designated preservation areas, although the Depot is located on the historic lands of the Umatilla Indians. The Cayuse Indians held territory to the east of the Depot as well, and both tribes made trips over the lands of the Depot area for hunting and gathering.

3.3.5 Rare, Threatened and Endangered Species

There are no threatened or endangered plant species currently recorded as being on or near the Depot. Laurence's milk-vetch (*Astragalus collinus 'laurentii'*) is found in the vicinity, but has not been documented for the Depot area. This is a species which is expected to be listed on the federal endangered species list in the near future.

During the Ecological Assessment conducted during 1992, six state-listed and one federally-listed sensitive bird species were observed. A sensitive species is one that has the potential of becoming threatened if specific habitats are not preserved. Swainson's hawk, the long-billed curlew, the burrowing owl, grasshopper sparrow, Lewis' woodpecker, and the bobolink are listed as state sensitive species, and the loggerhead shrike appears on the federal sensitive bird species list.

There is no formal management plan for the wildlife on the Depot. The current mission at UMDA is static storage of chemical munitions. Currently, there are no demolitions of expired ordnance or burning of excess propellant occurring or other operations which could impact wildlife on the property. Wildlife management will be addressed in the EIS for the Chem Demil facility prior to this facility becoming operational.

3.3.6 Cultural Resources

Cultural resources consist of prehistoric and historic sites, structures, districts, artifacts, or any other physical evidence of human activity considered important to a culture or community.

3.3.6.1 Historical Resources. Much of the UMDA regional historical and archaeological significance dates back to various Indian tribes that resided in the area, and to the early passage of settlers along the Oregon Trail. During the early 1800s, the first recorded history of the area (documented by Lewis and Clark) notes that the land was being used by Cayuse and Umatilla Indians. Historically, Indian use of the lands in the Depot area was characterized by fishing, hunting, and foraging for food. Hunting for deer, elk and other game took place throughout the region. Salmon fishing occurred on all major rivers and streams in the area.

No known traditional Indian village or sites are located at UMDA. Nevertheless, the Confederated Tribes of the Umatilla Indian Reservation are very interested in any reuse of the Depot. They are concerned with the protection and conservation of Indian and non-Indian cultural resources which may be located within the area and would like to be updated on the process of protection and conservation. A primary concern is the protection of traditional use

areas and resources such as fishing areas, hunting areas, root digging areas, berry picking areas, campgrounds and other resource use areas.

In 1984 a historic American Building Survey of the Depot was conducted. No highly significant or significant buildings were noted, but two minimally significant buildings were identified. They were the headquarters building (Building 1) and the firehouse (Building 2), both of which are located on Cedar Street past the main entrance of the Depot. The State Historic Preservation Office (SHPO), after a review of the Depot area, declared these two buildings eligible for inclusion on the National Register of Historic Places (NRHP) in 1988.

3.3.6.2 Archeological Resources. There are two potentially identifiable, but not presently recorded, archaeological resources at UMDA. A limited archaeological survey in 1987 identified one historic archaeological resource and one potential prehistoric site. According to the report, the historic archaeological site is possibly associated with the Oregon Trail, as indicated from 1861 and 1875 U.S. General Land Survey plates showing an "Old Emigrant Wagon Road" crossing the northeastern corner of UMDA. An analysis of 1993 aerial photography appears to confirm the location of the trail. The potential prehistoric site is located on the west rim of Coyote Coulee. The presence of the site is identified by isolated lithic flake tools scattered on the ground surface. The report concluded that the artifacts were used in conjunction with hunting at this location.

Buildings 1 and 2 are maintained for their current use as the Depot's headquarters building and the Firehouse. These buildings will continue to be utilized in their current capacity. The management plan for the archaeological sites involves monitoring of activities conducted near the archaeological sites so that these activities do not interfere with the integrity of the sites.

3.3.7 Other Resources

There are no other resources that were identified at UMDA.

3.4 Environmental Condition of Property

In October 1992, Public Law 102-426, CERFA amended Section 120(h) of CERCLA and established new requirements with respect to contamination assessment, cleanup, and regulatory agency notification/concurrence for federal facility closures. CERFA requires the federal government, before termination of federal activities on real property owned, to identify property where no hazardous substances were stored, released, or disposed of. These requirements retroactively affect the U.S. Army BRAC 88 and BRAC 91 environmental restoration activities, and are being implemented at BRAC 93 sites concurrently with their ENPAs. The primary CERFA objective is for federal agencies to identify real property offering the greatest opportunity for immediate reuse and redevelopment. Although CERFA does not mandate the U.S. Army transfer real property so identified, the first step in satisfying the objective is the requirement to identify real property where no CERCLA-regulated hazardous substances or petroleum products were stored, released, or disposed.

The U.S. Army has completed an investigation to identify the environmental condition of property at UMDA in compliance with CERFA. The final report was released in April 1994. CERFA investigations included the following assessment procedures:

- A review of historical installation records;
- Interviews with current and past installation employees; and
- Visual inspection of the installation.

During the CERFA investigation process, evidence was gathered that screened installation property into four categories, or parcel types. These categories are CERFA parcels, CERFA parcels with qualifiers, CERFA disqualified parcels, and CERFA excluded parcels as defined below.

An environmental condition of property map provided as Figures 3-2A and 3-2B identifies property at the installation based on the four CERFA parcel categories. The parcels are delineated using a 1-acre square grid for boundary definition. Where CERFA disqualified parcels and CERFA parcels with qualifiers have coincided, the overlapped area has been designated CERFA disqualified.

The USEPA Region X and ODEQ have reviewed the CERFA Report for the installation and USEPA Region X has concurred with the following CERFA parcels: 1P, 75P, 76P, 77P, 80P, 83P, 87P, and 90P. These parcels are all the clean parcels identified on Figure 3-2. Additionally, in its final CERFA Report, the U.S. Army identified property on which buildings containing asbestos and lead-based paint may be present. These properties are designated as CERFA Parcels with Qualifiers.

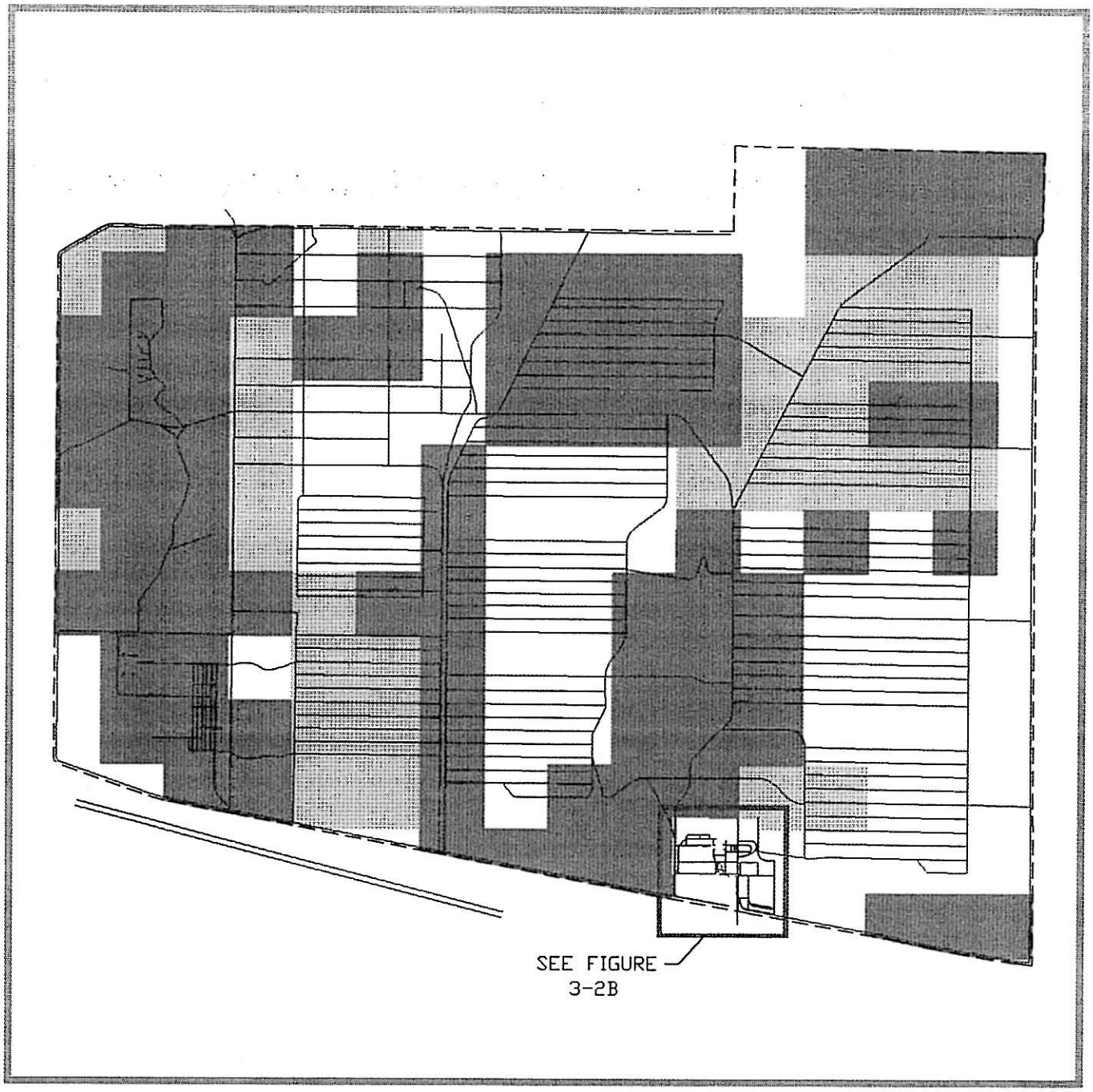
The U.S. Army has not sought USEPA's concurrence on these parcels under Section 120(h)(4) of CERCLA, 42 U.S.C. §9620(h)(4). Pursuant to CERCLA Sections 104 and 120 and USEPA policy, it may be possible to designate these parcels as uncontaminated property.

The U.S. Army may request USEPA concurrence on these parcels in the future, if the lead-based paint and the asbestos are part of the building structure and if there is no evidence that storage, disposal and/or release of lead-based paint or asbestos occurred or is occurring into the environment.

The following subsections provide a detailed description of each of the four categories description of each of the four categories used to classify property in the Environmental Condition of Property Map.

3.4.1 CERFA Parcels

CERFA parcels are those portions of the installation real property for which investigation reveals no evidence of storage for one year or more, release, or disposal of CERCLA hazardous substances, petroleum, or petroleum derivatives, and no evidence of being threatened by migration of such substances. CERFA parcels also include any portion of the installation which



EXPLANATION

- Installation Boundary
- CERFA Parcel
- CERFA Parcel with Qualifier(s)
- CERFA Disqualified Parcel
- CERFA Excluded Parcel

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Environmental Condition of Property

Figure 3-2A

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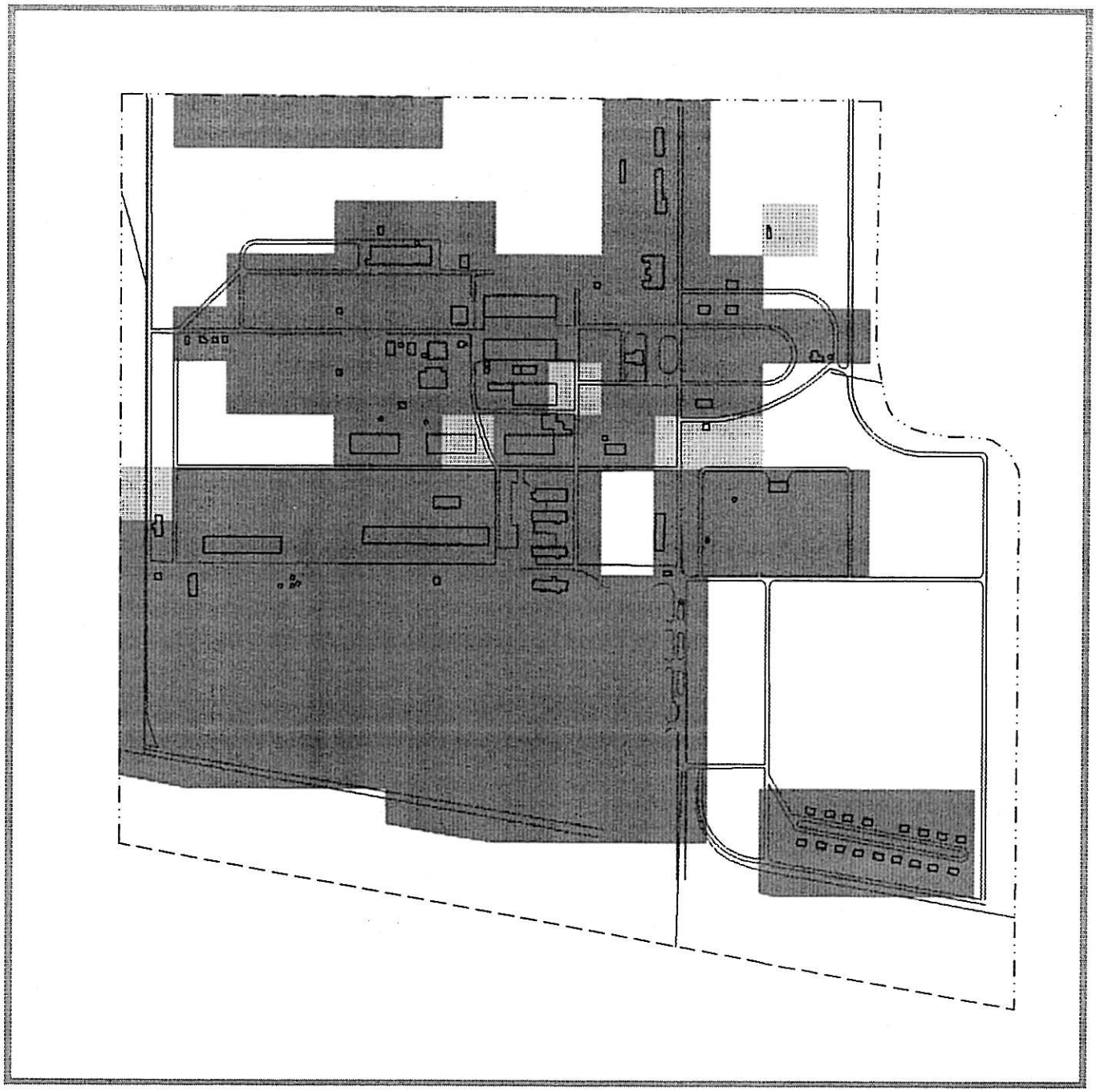
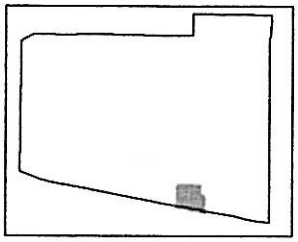


EXPLANATION

- Installation Boundary
- Administration Area Boundary
- CERFA Parcel
- CERFA Parcel with Qualifier(s)
- CERFA Disqualified Parcel
- CERFA Excluded Parcel



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Environmental Condition of Property in the Administration Area

Figure 3–2B

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once contained non-CERCLA hazards, including asbestos, UXO, lead-based paint, and radionuclides, but has since been fully remediated.

3.4.2 CERFA Parcels with Qualifiers

CERFA parcels with qualifiers are those portions of the installation real property for which investigation reveals no evidence of storage for one year or more, release, or disposal of CERCLA hazardous substances, petroleum, or petroleum derivatives, and no evidence of being threatened by migration of such substances. Parcels with qualifiers, however, contain non-CERCLA related hazards including the presence of asbestos, UXO, lead-based paint, radionuclides, radon, or stored (not in use) PCB containing equipment.

3.4.3 CERFA Disqualified Parcels

CERFA disqualified parcels are those portions of the installation real property for which there is evidence of CERCLA hazardous substances, petroleum, or petroleum derivative storage for one year, release or disposal, or threatened by such release or disposal. CERFA disqualified parcels also include any portion of the installation containing a PCB release or disposal, any explosive ordnance disposal locations, any storage sites of chemical ordnance, and any areas in which CERCLA hazardous substances or petroleum products have been released or disposed and subsequently fully remediated.

3.4.4 CERFA Excluded Parcels

CERFA excluded parcels are those portions of the installation real property retained by the DoD, and therefore not explicitly investigated for CERFA. CERFA excluded parcels also include any portions of the installation which have already been transferred by deed to a party outside the federal government, or by transfer assembly to another federal agency.

3.4.5 Suitability of Installation Property for Transfer by Deed

SARA Title I, Section 120 to CERCLA addresses the transfer of federal property on which any hazardous substances were stored during any one year period, or is known as the site of any release or disposal of hazardous substances. SARA Title I, Section 120 to CERCLA also requires any deed for the transfer of this federal property to contain, to the extent such information is available on the basis of a complete search of agency files, the following information.

- A notice of the type and quantity of any hazardous substance storage, release, or disposal,
- Notice of the time at which such storage, release, or disposal took place,
- A description of what, if any RA has occurred, and
- A covenant warranting that appropriate RA will be taken.

The U.S. Army has begun the identification of property suitable for transfer under CERCLA through the CERFA identification process. Those properties, designated CERFA parcels and CERFA parcels with qualifiers, have had no activities which could potentially preclude them

from transfer under CERCLA. CERFA disqualified parcels consist of those which have had CERCLA hazardous substance storage, and/or POL storage and/or releases.

The U.S. Army is currently in the process of refining the classification of those parcels that are CERFA disqualified to better identify those suitable for transfer under CERCLA. Through this refinement process, properties are defined as in one of the following seven categories:

- **Category 1:** Areas where no storage, release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).

- **Category 2:** Areas where only storage of hazardous substances or petroleum products has occurred (but no release, disposal, or migration from adjacent areas has occurred).

- **Category 3:** Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require a removal or RA.

- **Category 4:** Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all RAs necessary to protect human health and the environment have been taken.

- **Category 5:** Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, removal and/or RAs are under way, but all required RAs have not yet been taken.

- **Category 6:** Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but all required response actions have not yet been implemented.

- **Category 7:** Areas that are unevaluated or require additional evaluation.

Figure 3-3 which is provided in Appendix F, identifies those portions of UMDA based on the DoD seven parcel categorization. Under CERCLA, those parcels which are Category 1, 2, 3, 4 and 5 (if the remedy in place has been approved by the Administrator), meet the CERCLA criteria for suitability for transfer. Category 6 and 7 properties which have involved releases of hazardous substances cannot be transferred under CERCLA until environmental restoration is initiated.

3.5 Status of Community Involvement

Community relations activities that have taken place at UMDA to date include the following:

- **EIS Process.** During the development of the realignment EIS, a scoping meeting was held on June 7, 1989. Public comments were received by the U.S. Army on

draft EIS documents and were addressed in final versions of these documents. The final realignment EIS was published August 1991.

- **FFA Process.** After preparation of the UMDA FFA by the U.S. Army, USEPA, and ODEQ, the document was published for public comment, revised and finalized. The FFA was signed on October 31, 1989.

- **Information Repositories.** A public repository for information has been established in the public library in Hermiston, Oregon, and the USEPA Office in Portland, Oregon. It contains information relative to environmental activities at UMDA.

- **Administrative Record.** An Administrative Record has been established at UMDA in accordance with CERCLA requirements.

- **Public Involvement Response Plan (PIRP).** A PIRP has been prepared and is included in the RI/FS Work Plan as Part E. This PIRP provides the basis and procedures for involving the local community and federal, state, and local government agencies in the RI/FS process and keeping them informed of the work in progress and results of the study. The PIRP was approved in October 1990.

- **Technical Review Committee (TRC) and Restoration Advisory Board (RAB).** The TRC for UMDA was formed on March 29, 1989 and has met quarterly, since it was officially established until December 1993. In addition to U.S. Army, USEPA, ODEQ, the TRC includes representatives from Morrow County Court, Umatilla County Commissioner, mayors of surrounding towns, Umatilla County Emergency Management Agency, Oregon State Department of Human Resources, State Legislature, and several private citizens. In December 1993, the TRC was converted to a RAB in accordance with DoD guidance. The RAB has functions similar to the TRC, but expanded membership including the Chairman of the Reuse Task Force and additional private citizens. The RAB meetings are scheduled quarterly.

- **Mailing List.** A mailing list of all interested parties in the community is maintained by the Depot and updated regularly.

- **Fact Sheets.** Fact sheets describing the status of the IRP and compliance activities at the Depot have been distributed to the RAB, Reuse Task Force, and anyone requesting information.

- **Public Hearings.** Four Public Hearings on Proposed Plans (PPs) for various IRP sites have been held. The meetings occurred in May and September 1992, and in March 1994 and were held to present PPs for cleanup of various OUs and to solicit public comment on those PPs. These Public Hearings were announced in the local papers, The Hermiston Herald and The East Oregonian and Tri-Cities Herald.

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