

FINAL

**ENVIRONMENTAL CONDITION OF
PROPERTY REPORT**

**SGT. JEROME F. SEARS
U.S. ARMY RESERVE CENTER (OR010)
2731 SW MULTNOMAH BOULEVARD
PORTLAND, OREGON 97219**

Prepared For:

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MARCH 2007

CERTIFICATION

All information/documentation provided accurately reflects the environmental condition of the property. This ECP Report is in general accordance with the U.S. Department of Defense (DOD) requirements for completion of an Environmental Condition of Property (ECP) Report.

STEPHEN A. RIVERA
Environmental Division ARIM
Chief Environmental Division
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DATE

The undersigned certifies the contents of this report are in general accordance with DoD policies for the completion of an ECP.



LENARD GUNNELL, P.G.
Project Geologist
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DATE

EXECUTIVE SUMMARY

Lawhon & Associates, Inc. (Lawhon), in conjunction with Fuller, Mossbarger, Scott and May Engineers, Inc. (FMSM), under contract to the U.S. Army Corps of Engineers (USACE), Louisville District, has prepared this Environmental Condition of Property (ECP) Report for the Sgt. Jerome F. Sears U.S. Army Reserve Center (Facility ID OR010), hereafter referred to as the "Site" or "USAR Center." The Site is located at 2731 SW Multnomah Blvd., Portland, Oregon, and encompasses approximately 4 acres.

This ECP Report was prepared in conformance with primary Department of Defense and Army guidance, the Department of Defense's Base Redevelopment and Realignment Manual, DoD 4165.77-M (BRRM), Army regulations and the American Society for Testing and Materials (ASTM) Designation D 6008-96 (2005), *Standard Practice for Conducting Environmental Baseline Surveys*, as secondary guidance when it was not inconsistent with the primary guidance.

This ECP Report details the history of the property, including the U.S. Army Reserve and any prior tenant uses of the Site and the resulting environmental condition of the property.

The USAR Center facility is situated on approximately 4 acres of land, located in a predominantly residential area, in the City of Portland, Oregon. The Site consists of four permanent buildings: a 24,104 square-foot administrative building, a 4,669 square-foot organizational maintenance shop (OMS) building, a 5,084 square-foot storage building, and a three-sided cinderblock hazmat structure. The USAR Center is currently occupied by the 364th Civil Affairs Brigade and the 320th Psyop Company.

Based on a review of aerial photographs dating back to 1955 and U.S. Geological Survey (USGS) topographic maps dating back to 1954, the Site has served as a USAR Center since 1960. The administration and OMS buildings were constructed in 1960, while the storage building was constructed in 2000, and the three-sided cinderblock hazmat structure was constructed in 1990. The land and buildings are owned by the U.S. Government.

Areas of potential environmental concern were reviewed and Lawhon identified petroleum impacts relating to the USAR use of this property. Petroleum contamination from former heating oil underground storage tanks (USTs) was remediated. Documentation suggests that although contaminated soils, groundwater and mud were removed, some contaminated soil is still present at the site. Detectable concentrations of residual petroleum contaminants in groundwater were reported to be below regulatory designated cleanup standards.

In accordance with Department of Defense policy defining the classifications (See Deputy Under Secretary of Defense Goodman Memorandum dated 21 October 1996), the Property has been classified as Category 2. This classification does not include categorizing the property based on *de minimis* conditions that generally do not present material risk of harm to the public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

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LIST OF ACRONYMS

ACM	Asbestos Containing Material
AGI	AGI Technologies
AIRS	Aerometric Information Retrieval System
AMSA	Area Maintenance Support Activity
AR	Army Regulation
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
BRAC	Base Realignment and Closure
C-DOCKET	Criminal Docket System
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	CERCLA Information System
CERFA	Community Environmental Response Facilitation Act
CESQGs	Conditionally Exempt Small Quantity Generators
CFR	Code of Federal Regulations
CONEX	Container Express
DECAM	Directorate of Environmental Compliance and Management
DERP	Defense Environmental Restoration Program
DOCKET	Enforcement Docket
DOD	Department of Defense
DRMO	Defense Reutilization and Marketing Office
ECP	Environmental Condition of Property
EDR	Environmental Data Resources, Inc.

ESCI	Environmental Cleanup Site Information System
FEMA	Federal Emergency Management Agency
FFIS	Federal Facilities Information System
FINDS	Facility Index System/Facility Registry System
FMSM	Fuller, Mossbarger, Scott and May Engineers, Inc.
FUDS	Formerly Used Defense Sites
FURS	Federal Underground Injection Control
GSA	Gary Struthers Associates, Inc.
kg	Kilogram
Hazmat	Hazardous Materials
HSWA	Hazardous and Solid Waste Amendments
ICI	ICI, LLC (Contractor to the 70 th Regional Readiness Command)
ICR	Independent Cleanup Reports
ICRMP	Integrated Cultural Resources Management Plan
IFR	Indoor Firing Range
INRMP	Integrated Natural Resources Management Plan
KPFF	KPFF Consulting Engineers
L&A	Lawhon & Associates, Inc.
LBP	Lead Based Paint
LQG	Large Quantity Generators
LUST	Leaking Underground Storage Tank
MEC	Munitions and Explosives of Concern
MEP	Military Equipment Parking

MSDS	Material Safety Data Sheet
NEPA	National Environmental Policy Act
NFA	No Further Action
NHPA	National Historic Preservation Act
OMS	Organizational Maintenance Shop
OWS	Oil/Water Separator
ODEQ	Oregon Department of Environmental Quality
PADS	PCB Activity Data System
PAS	Performance Abatement Services
PCB	Polychlorinated Biphenyls
pCi/l	PicoCuries per Liter of Air
PCS	Permit Compliance System
POL	Petroleum, Oil, and Lubricant
POV	Privately-Owned Vehicle
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
RQ	Reportable Quantity
RRC	Regional Readiness Command
RSC	Regional Support Command
Site	U.S. Army Reserve Center (OR010)
SQG	Small Quantity Generators
STATE	State Environmental Laws and Statute

SOW	Scope of Work
SPCCP	Spill Prevention Control and Countermeasures Plan
TCLP	Toxicity Characteristic Leaching Procedure
TPH-D	Total Petroleum Hydrocarbons-Diesel
TSD	Treatment, Storage, or Disposal
TPH	Total Petroleum Hydrocarbons
USACE	United States Army Corps of Engineers
USAR	United States Army Reserve
USATHAMA	United States Army Toxic and Hazardous Materials Agency
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
UXO	Unexploded Ordnance
VCP	Voluntary Cleanup Program

1.0 INTRODUCTION

Lawhon & Associates, Inc., Columbus, Ohio was authorized to prepare an Environmental Condition of Property report for the Sgt. Jerome F. Sears U.S. Army Reserve Center (OR010). The facility is located at 2731 SW Multnomah Boulevard Portland, Multnomah County, Oregon, hereafter referred to as the "Site" or "USAR Center". In support of the ECP Report, a visual reconnaissance of the Site was conducted on September 8, 2006. The purpose of the visit was to visually obtain information indicating the environmental condition of property at the Site.

1.1 PURPOSE OF ENVIRONMENTAL CONDITION OF PROPERTY (ECP)

The Military Department with real property accountability shall assess, determine and document the environmental condition of all transferable property in an ECP Report. This ECP Report is based on readily available information. Pursuant to the Department of Defense's policy, set forth in the Base Redevelopment and Realignment Manual (DoD 4165.66-M, March 1, 2006) Section C8.3 (BRRM), the primary purposes of the ECP Report include the following:

- Provide the Army with information it may use to make disposal decisions;
- Provide the public with information relative to the environmental condition of the property;
- Assist in community planning for the reuse of Base Realignment and Closure (BRAC) property;
- Assist Federal agencies during the property screening process;
- Provide information for prospective buyers;
- Assist prospective new owners in meeting the requirements under EPA's "All Appropriate Inquiry" regulations;
- Provide information about completed remedial and corrective actions at the property;
- Assist in determining appropriate responsibilities, asset valuation, and liabilities with other parties to a transaction.

The ECP Report contains the information required to comply with the provisions of 40 Code of Federal Regulations (CFR) Part 373, which require that a notice accompany contracts for the sale of, and deeds entered into, for the transfer of federal property on

which any hazardous substance was stored, released or disposed of. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Section 120(h) stipulates that a notice is required if certain quantities of designated hazardous substances have been stored on the property for one year or more – specifically, quantities exceeding 1,000 kilograms or the reportable quantity, whichever is greater, of the substances specified in 40 CFR 302.4 or one kilogram of acutely hazardous waste as defined in 40 CFR 261.30. A notice is also required if hazardous substances have been disposed of or released on the property in an amount greater than or equal to the reportable quantity. Army Regulation (AR) 200-1 requires that the ECP Report address asbestos, lead-based paint, radon and other substances potentially hazardous to human health.

This ECP Report used the American Society for Testing and materials (ASTM) Designation D 6008-96 (2005), *Standard Practice for Conducting Environmental Baseline Surveys* as a guideline when not inconsistent with the BRRM, CERCLA § 120, Army regulations and other applicable Army guidance.

1.2 SCOPE OF SERVICES

This ECP report covers the approximate 4-acre USAR Center located at 2731 SW Multnomah Boulevard, Multnomah County, Portland, Oregon 97219. The Site is bordered by SW 25th Avenue and Qwest Telecommunication to the east, SW Multnomah Boulevard to the south, and residential properties to the west and north. Site maps are provided in Appendix A. Appendix B provides photographs taken during the September 2006 Site visit. Appendix C provides chain of title and environmental lien information. Historical environmental documents and reports are provided in Appendix D, while Appendix E contains the Environmental Data Resources, Inc. (EDR) reports.

This ECP report classifies the property into one of seven DoD Environmental ECP categories as defined by the Deputy Under Secretary of Defense S. Goodman Memorandum, “Clarification of ‘Uncontaminated’ Environmental Condition of Property at BRAC Installations” (21 October 1996). The property classification categories are as follows:

- Category 1 – Areas where no 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 the release or disposal of petroleum products has occurred.
- Category 3 – Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response.

- Category 4 – Areas where release, disposal, and/or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken.
- Category 5 – Areas where release, disposal, and/or migration of hazardous substances has occurred, and removal or remedial actions are under way, but all required remedial actions have not yet been taken.
- Category 6 – Areas where release, disposal, and/or migration of hazardous substances has occurred, but required actions have not yet been implemented.
- Category 7 – Areas that are not evaluated or require additional evaluation.

2.0 SITE LOCATION AND PHYSICAL DESCRIPTION

2.1 SITE LOCATION

The USAR Center is located in the west-northwest portion of Multnomah County, Oregon, within the city limits of Portland, Oregon. The Site is located in a primarily residential area with some commercial businesses situated southeast of SW Multnomah Boulevard. Figure 1 in Appendix A provides a general site location map.

2.2 ASSET INFORMATION

Facility Name and Address:

Sears Hall U.S. Army Reserve Center (OR010)
2731 SW Multnomah Boulevard
Portland Oregon 97219

Property Owner: United States Government

Date of Ownership: February 20, 1959

Current Occupant: 364th Civil Affairs Brigade and 320th Psyop Company

Zoning: R1 – Residential

County, State: Multnomah County, Oregon

USGS Quadrangle(s): Lake Oswego, Oregon

Section/Township/Range: Section 20, Township 1 South, Range 1 East

Latitude/Longitude: 45° 27' 57.6" N; 122° 42' 18.4" W

Legal Description: Being that parcel or tract of land, known as a apportion of Lot 2 and Lot 3 of Block 7 of Ryan Place (Tract 100); portion of Lot 1 (Tract 101) and Lot 4 (Tract 102) of Block 6 of Ryan Place; Lot 1 (Tract 103) and Lot 2 (Tract 104) of Block 9 of Ryan Place, situated and lying in Section 20, Township 1 South, Range 1 East of the Willamette Meridian, in the City of Portland, Multnomah County, State of Oregon

2.3 PHYSICAL DESCRIPTION

The USAR Center is situated on an irregular-shaped parcel encompassing approximately 4 acres (Figure 2 in Appendix A). The Site consists of Sears Hall administration building (referred to as Sears Hall or the administration building), an OMS building (labeled AMSA on Figure 2 in Appendix A), a storage building, and a three-sided hazmat storage structure. The administration and OMS buildings were constructed in 1960 and are concrete block and brick construction on concrete slab. The administration building was reportedly renovated in 2002, with the drill hall portion receiving renovations in 2004. The storage building was constructed sometime after 1994 and the hazmat storage structure was constructed in 1975.

The southern portion of the administration building consists of two stories occupied by offices, while the northern portion consists of one story occupied by a drill hall. A kitchen was formerly located off the drill hall; however, it was converted to an office and storage during the 2002 and 2004 renovations. The administration building is approximately 24,104 square feet. Photographs 1 – 7 in Appendix B provide exterior views of the administration building. The administration building contains offices, classrooms, storage rooms, boiler room, and a drill hall. A locked arms vault is also located within the administration building. Photographs 8 -14 in Appendix B provide interior views of the administration building. Figures 3 and 4 in Appendix A provide layouts of the interior of the administration building.

The OMS building is situated on the northern portion of the Site and consists of a 4,669 square foot single-story structure. The OMS building contains three vehicle service bays with roll-up metal doors. At the time of the Site reconnaissance, several rooms within the OMS building were locked and inaccessible, and facility personnel were not able to provide information concerning the use of these rooms. Based on records reviewed for the Site (Section 3.5), however, the locked rooms appear to be or were historically occupied by offices, a photo-developing room, a battery room, and a paint room. Photographs 15 and 16 in Appendix B show exterior views of the OMS building, while Photographs 17 and 18 in Appendix B show the interior of the OMS building. Figure 5 in Appendix A provides a layout of the interior of the OMS building.

A 5,084 square-foot single-story storage building constructed of corrugated metal with a sloped corrugated metal roof is situated immediately west of the administration building. This structure is utilized for unit storage. According to Site personnel, no hazardous materials are located or have historically been located in the storage building. Photographs 27 and 28 in Appendix B show the eastern and southern exteriors of the storage building. Figure 6 in Appendix A shows the interior layout of the storage building.

A three-sided cinder block constructed hazmat storage structure (Photograph 21 in Appendix B) and a smaller, metal hazmat storage shed are situated east of the OMS

building. Two non-permanent metal Container Express (CONEX) structures were also observed east of the OMS building. During the September 2006 Site visit, personnel stated that the CONEX structures contained unit support equipment which is used off-site. An MEP area (Photograph 24 in Appendix B) and a POV parking area are located east of the OMS building and administration building, respectively. The Site is surrounded by chain link security fencing, and a chain link security fence also separates the POV parking lot from the OMS and the MEP area. Concrete security barriers are located in front of the administration building and between the POV area and the administration building. Approximately 90% of the Site is covered by impervious surface features (e.g., asphalt parking areas, driveways, concrete walkways, building footprints, etc.). The remaining ground surface is covered by lawn, and landscape shrubs and trees.

The MEP and POV parking areas slope gently southeast toward an oil/water separator (OWS) which is located in a grassy area at the east end of the Site. Water is discharged to the City of Portland storm water sewer. The OWS is reportedly inspected and serviced by an outside contractor when needed. Figure 2 in Appendix A provides a current plan view layout of the Site. Appendix B also provides photographs taken during the September 2006 Site visit.

2.4 SITE HYDROLOGY AND GEOLOGY

2.4.1 Surface Water Characteristics

Figure 7 in Appendix A provides a portion of the 1983 Lake Oswego, Oregon, USGS topographic map which includes the Site. As shown, the Site is situated at an elevation of approximately 450 feet above mean sea level and slopes gently southeast towards Multnomah Boulevard. Surface water runoff at the Site is directed towards drains situated in paved and unpaved portions of the Site and to storm water drains in adjoining roadways. Additional information concerning the drains at the Site is discussed in Section 3.5 of this report.

No surface water features are located in the immediate vicinity of the Site. The Willamette River, located approximately 1.75 mile east of the Site, is the closest major surface water feature. The Willamette River joins the Columbia River, which ultimately discharges to the Pacific Ocean.

According to the EDR Report which references the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, Community Panel 4101830045D, the Site is not included in either the 100-year or the 500-year flood plain. Figure 8 in Appendix A provides a map depicting the extent of the nearest 100-year flood plain in relation to the Site.

2.4.2 Geology/Hydrogeological Characteristics

Geology information was obtained from the Oregon Department of Geology and Mineral Industries (personal communication, Niewendorp, 2007). The Portland Oregon area lies within the Willamette Valley or basin physiographic province between the Western Cascades and Oregon Coastal Range (Orr, 1999).

According to information in the EDR Report acquired from the Soil Conservation Service's (Natural Resource Conservation Service) State Soil Geographic Database for Multnomah County, Oregon, specific types of soil at the Site are from the Cascade Series. According to information provided in the EDR Geocheck Report, this soil does not meet the requirements for a hydric soil.

The surface soil consists of silt loam described to have slow infiltration rates with layers impeding downward movement of water, or soils with moderately fine or fine textures. In a typical profile, the surface layer extends to a depth of approximately 8 inches, beneath which are two layers of silt loams that can extend up to 60 inches.

2.5 SITE UTILITIES

Water Service – The City of Portland provides potable water service to the Site.

Sanitary Sewer System – The City of Portland provides sanitary sewer service to the Site. The primary source of wastewater that is directed to the city sewer system includes non-process wastewater (bathrooms, sinks, etc.) and storm water.

Gas & Electric – Northwest Natural Gas and Pacific General Electric provides gas and electric service to the Site, respectively.

2.6 WATER SUPPLY WELLS & SEPTIC SYSTEMS

Based upon a review of available historical site and agency records and interviews with site personnel, neither a water supply well nor a septic system is or was located at the Site.

A search of federal and state water well databases identified 14 wells located within a 1 mile radius of the Site. None of the wells are directly adjacent to the Site. No information regarding the purpose of the wells is available in the EDR report (Appendix E), however, several of the wells appear to be monitoring wells, and one well is listed as abandoned. None of the wells that appear to be monitoring wells are within ½ mile of the Site. No information regarding contamination of the wells is presented in the state and federal databases presented in the EDR report. In addition, no information regarding direction of groundwater flow is available within a 1 mile radius of the Site. No public water supply wells are located within 1 mile of the Site.

3.0 SITE HISTORY

3.1 HISTORY OF OWNERSHIP

Land Title Records for the Site were reviewed back to 1942. A Historical Chain of Title Report provided by EDR (Appendix C) indicates the Site consists of five tracts which were granted to the United States of America in 1959. Tract 100 was granted on February 20, 1959 by The Multnomah Community Church United Presbyterian of North America; Tract 101 was granted on February 20, 1959 by Kenneth F. and Claudia L. Bissell; Tract 102 was granted on January 22, 1959 by West Hills Baptist Church; and the U.S Government appears to have acquired title to Tracts 103 and 104 in 1959 from Lyle M. and Irene Baker, however, no conveyance of record was found at the Multnomah County Recorders Office. The chain of title report does not contain records of any institutional controls or engineering controls. EDR also provided an Environmental Lien Report (Appendix C) that indicates there have been no reported use limitations nor any environmental liens filed against the Site.

Available business directories including City, cross-reference, and telephone directories were reviewed, if available, at approximately 5-year intervals for the years spanning 1964 through 1996. According to a City Directory provided by EDR dated July 18, 2006, the address of the USAR Center was first listed in the research source (Polk's City Directory) in 1964 as the US Army Reserve Center (Sears Hall). A copy of the City Directory is included in Appendix E.

3.2 PAST USES AND OPERATIONS

Initial development of the Site occurred in approximately 1960 with the construction of the administration and OMS buildings. Facility personnel interviewed during the Site reconnaissance were not aware of the previous Site use prior to 1960. Based on review of historical resources, it appears the area of the Site was generally undeveloped from at least as early as 1930 until development of the Site in 1960, except for a residential dwelling that was situated on the north central portion of the Site (1930 through mid 1950s). The Site has served as a reserve and mobilization center for the U.S. Army Reserve since the U.S. Government acquired the land in 1959.

The USAR Center is currently occupied by the Headquarters for the 364th Civil Affairs Brigade and the 320th Psyop Company. Historically, the Site primarily functioned as an administrative and educational facility, with limited maintenance of military vehicles occurring in the OMS building.

Currently and historically, the OMS building has been used to perform limited maintenance activities on military vehicles and equipment. Activities inside the OMS building include general vehicle servicing such as performing oil changes and preventative maintenance checks. Based on review of a historic Site plan contained in

the Spill Prevention Control and Countermeasure Plan (SPCCP) prepared in 1995, a petroleum, oil, and lubricant (POL) “cage” was formerly situated on the northeastern portion of the Site. At the time of the September 2006 Site reconnaissance, this area contained two CONEX portable containers.

Another feature depicted on the SPCCP Site plan was a wash rack and associated OWS located west of the OMS building. Based on documented information provided by the 70th Regional Readiness Command (RRC), the wash rack was removed by an outside contractor in 1998. No additional information concerning the former wash rack or OWS has been obtained as of the date of this report. The current OWS system was reportedly installed around 1993 and is located at the far eastern end of the Site.

Historic documents, personnel interviews, historical aerial photographs, Sanborn maps, and topographic maps were the primary sources of information on past use and operations at the Site. Figure 7 and Figures 9 through 20 in Appendix A provide USGS topographical maps, Sanborn maps, and aerial views of the Site and surrounding areas in 1930, 1951, 1954, 1955, 1961, 1963, 1970, 1975, 1983, 1984, and 1994.

The 1930 and 1951 Sanborn maps (Figures 13 and 14 in Appendix A) show the Site undeveloped with the exception to the north central portion which is developed with a residential dwelling. 27th Avenue transects the central portion of the Site terminating at the main thoroughfare, in the present day location of Multnomah Boulevard, which contains electric rail car lines.

No buildings or other features are depicted on the 1954 topographic map (Figure 9 in Appendix A). Similarly, the 1955 aerial photograph (Figure 16 in Appendix A) shows the site undeveloped. No remnant of 27th Avenue transecting the Site as indicated in the 1930 and 1951 Sanborn maps is evident.

A building configured similar to the existing administration building is shown on the Site in the 1961 topographic map and 1963 aerial photograph (Figures 10 and 17 in Appendix A) along with another smaller structure in the approximate location of the existing OMS building.

Sometime between the 1951 and 1970 Sanborn maps, 26th Ave. appears to have been renumbered to 25th Ave., which is the current eastern boundary of the Site. No other significant changes to the Site in the 1970 topographic map, Sanborn map, or aerial photograph (Figures 11, 15, and 18 in Appendix A) were noted relative to the previous resources reviewed.

No significant change to the Site in the 1975 topographic map (Figure 12 in Appendix A) was noted relative to the previous resources reviewed.

No significant changes to the Site in the 1983 topographic map or 1984 aerial photograph (Figures 7 and 19 in Appendix A) were noted relative to the previous resource reviewed.

No significant change to the Site in the 1994 aerial photograph (Figure 20 in Appendix A) was noted relative to the previous resources reviewed.

3.3 PAST USE, STORAGE, DISPOSAL, AND RELEASE OF HAZARDOUS SUBSTANCES

3.3.1 Past Use and Storage of Hazardous Substances

Information related to the past use and storage of hazardous substances at the Site was compiled through review of available Site records, search of Federal and State environmental databases, and interviews with Army Reserve personnel.

Chemicals formerly used and stored at the Site were associated with vehicle and facility maintenance activities and janitorial services. Janitorial chemicals and building maintenance-related products were stored in the designated storage area within the janitorial closets located in the administration building. Hazardous materials associated with vehicle maintenance activities have historically been stored within a former POL "cage" which was located on the northeastern portion of the Site, in the three-sided hazmat storage structure, metal hazmat shed, and within designated areas within the OMS building. Numerous deficiencies with regard to storage practices and administrative functions as related to record keeping have been noted in inspections conducted by the Oregon Department of Environmental Quality (ODEQ).

Certain types of chemical products used and stored at the Site would have contained CERCLA hazardous substances and would have been stored on a rotational basis in amounts necessary to support the unit through direct support level maintenance. However, there is no indication that CERCLA hazardous substances were stored at the Site for 1 year or more in excess of corresponding reportable quantities.

3.3.2 Past Disposal and Release of Hazardous Substances

Information related to past disposal and potential release of hazardous substances at the Site was compiled through review of available Site records, search of Federal and State environmental databases, and interviews with Army Reserve personnel. According to Army Reserve personnel and site records, on-site disposal of hazardous materials or wastes has not occurred at the Site. No stained soil or stressed vegetation was observed during the September 2006 Site visit. Additionally, the MEP area and POV parking area only showed minor signs of staining and no noxious or foul odors were noted during the site visit.

3.4 PAST PRESENCE OF BULK PETROLEUM STORAGE TANKS

No evidence of current USTs was observed on the Site during the Site reconnaissance. Site records indicate that three heating oil USTs were removed in 1993. According to information reviewed, upon removal of a 10,000-gallon capacity heating oil UST, an abandoned 675-gallon heating oil UST was discovered. An additional 675-gallon capacity UST was also removed from the area west of the 'Motor Pool Building' (OMS building). Refer to Figure 2 in Appendix A for the approximate locations of the former USTs. The discovered UST was reported to be "encased in 2 feet of contaminated soil." A "Visqueen (vapor) barrier" was placed in the excavation after removal of the 10,000 and 675-gallon capacity USTs and the pit was backfilled with clean sand and a 2 foot layer of soil which was then seeded. Contaminated soils were later excavated in remedial efforts performed in May 1996. According to the report, although a total of 98.21 tons of petroleum contaminated soil, 1,735 gallons of groundwater, and 30 gallons of mud were removed from the area north of the administration building; residual soil contamination was still present. Detectable concentrations of residual contaminants in groundwater were reported to be below regulatory designated cleanup standards.

3.5 REVIEW OF PREVIOUS ENVIRONMENTAL REPORTS

A review of site records produced several reports pertaining to the Site. The following subsections provide a brief summary of these reports. Copies of the reports, unless otherwise specified, are provided in Appendix D.

3.5.1 1989 United States Army Toxic and Hazardous Materials Agency (USATHAMA) Property Report Database Printout

This facility data report identifies 10 areas of hazardous materials;

- Vehicle wash rack and OWS (report states that the OWS is connected to the municipal storm sewer);
- A 675-gallon fuel oil UST (report states that the tank was installed around 1959 and will soon be abandoned when a new furnace is installed, also that the tank has not been leak tested);
- A battery room (report states that the room has no curb, is ventilated and contains approximately 5 gallons of sulfuric acid and 5 batteries);
- A POL storage room with paint, thinner, oil, gasoline, grease, caustic xylene (sic), and antifreeze (report states the room has an outside entrance);

- 2 paint lockers , one in the OMS and one outside the OMS in the paved MEP area (report states that both are noted to have spill containment wells, and have 15 gallons of paint each);
- Portable parts cleaner with 10 gallons of waste solvent;
- Drum storage area with 3 55-gallon drums of waste oil (report states that these are stored outside along side the OMS with no spill containment);
- A 10,000-gallon fuel oil UST (report states that the tank was installed between in 1976-1980, and will be abandoned when a new furnace will be replaced in 1989);
- A photography lab with developer and toner (report states that less than 10 rolls of film are processed per year, and that chemicals are rinsed to sanitary sewer); and
- Transformers with potential for containing Polychlorinated Biphenyls (PCBs) (report states that 3 pole-mounted transformers are located at the southwest corner of the facility).

3.5.2 May 1993, Oil/Water Separators and Storm Drainage System Improvements

KPFF Consulting Engineers prepared this report (dated May 21, 1993) for numerous USAR Center locations throughout Oregon and Washington. The report states that in 1993, existing Site drainage is collected through a series of catch basins, pipes and manholes to the east side of the Site along SW 25th Avenue. The drainage then flowed south and into the City system along SW Multnomah Boulevard. The report proposed improvements including an upgrade to a single OWS located along SW 25th Avenue to provide for treatment of all the water running off the site. The proposed OWS is designed to be in-line with the existing pipe system. Existing pipe grades do not allow for a high flow bypass system.

3.5.3 1994 Asbestos Survey

An Asbestos Survey of the Site was performed by AGI Technologies (AGI), dated May 1994. According to this report, a limited abatement project was conducted at the Site prior to 1994; however, no records were obtained documenting the locations and quantities of removed asbestos containing material (ACM) to summarize in this report. During AGI's inspection of the Site, it was found that the thermal pipe insulation at the site had been removed and replaced with fiberglass insulation; however, ACM insulation remained above the ceilings.

Laboratory analysis of samples collected and analyzed from the administration building indicated the presence of ACMs, and ACMs were assumed present in the OMS building based on observations by AGI. ACMs reported in the administration building included dark brown floor tile and associated mastic, and brown mastic associated with floor tile that was previously reported not to be ACM. Both friable and non-friable ACM were identified in the report. Assumed ACMs, but not tested included gray cement asbestos board panels (transite), gray boiler room gaskets, and white thermal pipe insulation (reported as friable) located primarily above the ceiling along the first floor hallway in the administration building. Materials observed in the OMS building but not sampled listed the following as potential ACMs: insulated metal doors, wall board/lath and plaster walls, and roofing materials.

3.5.4 June 1994, Field Report for Lead Abatement at the Portland South Range

Performance Abatement Services (PAS) prepared this report (dated June 27, 1994) which documents lead abatement activities associated with an indoor firing range (IFR) in the administration building. The report states that sometime prior to abatement, the sand pit area had been converted for use as storage, and had been encapsulated with a concrete slab. In addition, “steel works, acoustical materials, and firing apparatus were no longer in place.” According to the PAS report, Site personnel reported the use of the IFR had been discontinued and converted for use as storage for many years prior, and it was reported that “most of the surfaces had been painted since the conversion.” Field work conducted by PAS “consisted primarily of cleaning ductwork that was suspected of being contaminated when the area was a firing range.” After cleaning, five random ductwork locations were sampled and qualitative results did not indicate the presence of lead. PAS concluded that the Site “is free of lead contamination due to past use as a firing range”, based on the qualitative samples in the ductwork. The conclusions further stated that when the remodeled room was painted remaining lead was most likely encapsulated under the paint layers. During the September 2006 Site reconnaissance, this room was observed to be occupied by a training classroom (Photograph 8 in Appendix B).

3.5.5 August 1995, Sears Hall Spill Prevention Control and Countermeasure Plan

The SPCCP (dated August 1, 1995) was prepared by Woodward-Clyde, Inc. to outline the routine steps to be taken in the event of a spill in daily operations and to reduce the amount of waste generated and likelihood of a spill. The report describes the OMS building as being equipped with a paint room, flammable storage cabinet, POL storage cage with drain to a wash rack OWS, a hazardous materials storage building with a containment sump in the floor, and wash rack with OWS. The discharge point of the OWS is reported as unknown. Hazardous materials reported for the Site include paints,

lithographic fluids, lubricants, adhesives, sealants, cleaners, solvents and welding gases. Potentially hazardous wastes stored at the Site include vehicle fluids, used reprographics chemicals, and sludge/floating product within the OWS. A figure contained in this report shows a wash rack and associated OWS situated west of the OMS building. The Site layout plan also depicts the surface water flow pattern to flow toward storm drains located in the asphalt paved areas north and east of the administration building. The interior of the OMS building depicts three service bays, a battery room, offices, a printing fluid storage, and a paint room. The Site map also shows a hazardous materials building, and POL cage east of the OMS. Tables which contain information related to the use, storage and management practices (including frequency of disposal) are provided in this report.

3.5.6 Petroleum-Contaminated Soil Removal and Disposal, June 1996

Gary Struthers Associates, Inc. (GSA) conducted the removal and disposal of petroleum-contaminated soil at the Site associated with former USTs. This report indicates that three USTs were removed by Tom New Construction Company in July 1993. A 10,000-gallon UST was located approximately 30 feet southwest of the motor pool entrance area. Depth to the tank was 13 feet measured from ground level to the bottom of the tank. Total excavated depth is not documented. Contaminated soil stains and odor were present along the east wall at 8 feet below ground. During excavation of the contaminated soil, an abandoned UST was discovered. The discovered 675-gallon UST was encased in 2 feet of contaminated soil. Soils between the 10,000-gallon and the 675-gallon USTs were a dark gray color and exhibited strong odors of diesel. A "Visqueen (vapor) barrier" was placed in the pit and was backfilled with clean sand. A 2 foot layer of soil was placed over the sand and the area was leveled and seeded. In addition to the two above-referenced USTs, an additional 675-gallon heating oil tank located west of the OMS was also removed. The concentrations of contaminants for this location were reported to be below laboratory detection limits.

Upon conclusion of GSA's efforts to resolve the soil contamination, analytical results indicated that soil contamination remains at the Site. The Oregon Department of Environmental Quality ODEQ determines cleanup standards for Toxicity Characteristic Leaching Procedure (TCLP)-Lead, Total Petroleum Hydrocarbons-Diesel (TPH-D) extended and 418.1 modified for soil, on site specific rational. The TPH-D soil sample results from the USAR Center are all above the cleanup standard of 100 parts per million (ppm) for diesel (determined by ODEQ). Although gasoline was detected in soil samples collected, all were below the cleanup standard of 40 ppm (also determined by ODEQ). TCLP Lead, benzene, toluene and ethylbenzene analysis results indicated non-detectable concentrations.

3.5.7 1998, Centennial Contractors Daily Construction Quality Control Report, Wash Rack Removal

Centennial Contractors completed a Daily Construction Quality Control Report on September 15, 1998 stating that they finished the demolition of the wash rack. No information was available related to whether or not surrounding soils were sampled during excavation and demolition of the wash rack. No figures were associated with the removal documentation; however, based on historic Site plans contained in other pertinent records reviewed for the Site, the former wash rack was situated on the western exterior of the OMS building and consisted of a drain system that discharged to an OWS. No information regarding removal of this OWS was available; however, the report states that the drain was capped.

3.5.8 1999 and 2001 Hazardous Material Inspection Letters and 70th RSC Memorandums

A document, dated December 14, 1999, summarizes an ODEQ hazardous materials inspection of the Site on December 1, 1999. No violations were noted during the inspection; however, the following concerns were reported: staff training with regards to hazardous materials generation, manifest preparation, and disposal locations. Other concerns noted were related to whether or not the photo developer room was planned to be used in the future. It was recommended that if the room was not intended for future use, that the chemicals be used, recycled, or disposed of properly. An inspection that was conducted on December 6, 1999 by the ODEQ indicated that the on-Site photography lab had not been utilized since March 1999. Other information contained in the letter documenting the inspection indicated that waste streams generated for 1999 included "waste oil, waste antifreeze, Safety-Kleen parts washer, aerosol cans, waste batteries, and occasional outdated products." According to the letter, a paint room "was observed but painting is performed elsewhere." It was reported that aerosols are utilized in "touchups" and empty cans were picked up by DRMO, however, no manifests were available for review related to the off-haul of empty cans.

A 70th RRC Memorandum, dated December 29, 1999, was issued to facility personnel in response to the ODEQ concerns detailed in the aforementioned inspection letter. The memo indicates that facility personnel involved in signing manifest documentation and handling hazardous materials attend training courses; that environmental records be kept at the Site; in addition to numerous other actions to be performed to comply with ODEQ requirements.

A Department of the Army Memorandum (dated November 2, 2001) was prepared in response to deficiencies noted at the Site during an inspection performed by the ODEQ in October 2001. A summary of observations and associated actions to be performed to comply with the letter indicates that drums at the Site were not properly labeled; hazardous materials were noted throughout the OMS building and not stored within

proper containment (i.e. flammable storage cabinets). There was no inventory of chemicals, along with various other noncompliance concerns.

3.5.9 January 2003, Integrated Cultural Resources Management Plan (ICRMP) Historic Properties Component

This report was compiled by Parsons, Inc., in conjunction with the 70th RRC. The Historic Properties Component was documented to comply with Section 106 of the National Historic Preservation Act (NHPA). The ICRMP states that “to date, there are no properties of traditional religious and cultural importance identified on the 70th RRC facilities within the state of Oregon.”

3.5.10 September 2004, Draft Survey of Drains, Pollution Control Equipment, and Discharge Points

A 2004 Survey of Drains, Pollution Control Equipment, and Discharge Points identified 12 exterior surface drains, and an OWS at the Site. In addition, seven interior floor drains are located within the mechanical room and a former kitchen area. A grease trap is also located in the former kitchen area; however, it is now inaccessible due to renovations.

According to the report, the interior drains are tied into the City’s sanitary sewer system. The report states that most likely the grease trap also discharges to the sanitary sewer system. Nine of the exterior drains ultimately go to the OWS and join the city storm sewer. Two of the other three exterior drains are associated with a stair-well and a can wash station, where cans from the kitchen would have been washed, and are reported to connect to the city sanitary sewer off-site. The third drain which doesn’t connect to the OWS flows east offsite where it joins a storm sewer.

4.0 ADJACENT PROPERTIES

Figure 20 in Appendix A provides a 1994 aerial view of the Site and adjacent properties. The aerial accurately depicts the current land use surrounding the Site. Residential properties adjoin the Site to the north and west. A commercial building currently occupied by Qwest Telecommunications, adjoins the Site to the east. Multnomah Boulevard adjoins the Site to the south followed by residential homes. Small commercial buildings further southeast of the site along Multnomah Boulevard are currently occupied by a woodworking business, and small law and medical practices. These buildings appear to be converted residences. Table 1 provides a list of adjacent properties with their directional location in regards to the Site. Photographs 30 through 31 in Appendix B provide views of adjacent properties and surrounding land use.

TABLE 1 LIST OF ADJACENT PROPERTIES			
Direction From Site	Name/Type of Property	Address	Zoning
North	Residential	Various addresses	R7 – Residential
South	Residential, Custom Woodworking Shop, Attorney and Medical related offices	Various addresses	R7 – Residential CG – Commercial/Residential
East	Qwest Telecommunication	8033 25 th Avenue	R1 – Residential
West	Woodmont Duplex Homes	Various addresses	R1 – Residential

Appendix A and Appendix E provide historical aerial photographs, topographic maps, and EDR Reports, which were used to evaluate any potential environmental impacts on adjacent properties that may have also impacted the environmental condition at the Site. Land use at all adjacent properties does not appear to have changed significantly over the years and does not appear to have impacted the environmental conditions of the USAR Center.

5.0 REVIEW OF REGULATORY INFORMATION

A component of the ECP is the review of all reasonably obtainable federal, state, and local government records for the Site and surrounding properties, where there has been a release or likely release of any hazardous substance or any petroleum product, and which is likely to cause or contribute to a release or threatened release of any hazardous substance or any petroleum product on the federal real property. A regulatory database summary was acquired from EDR on July 14, 2006. The regulatory database summary consolidates standard federal, state, local, and tribal environmental record sources based on ASTM D 6008-96 (2005) recommended minimum search distances from the Site. A copy of the complete EDR report is included in Appendix E. Acronyms used in Tables and text throughout this section are defined in the EDR report in Appendix E. "High Risk" properties are those that exhibit significant environmental conditions that have the probability of adversely affecting the environmental conditions at another site.

5.1 FEDERAL ENVIRONMENTAL RECORDS

The regulatory information presented in Table 2 below was obtained from the EDR Federal regulatory database search report.

TABLE 2 FEDERAL DATABASE SEARCH								
Database	Search Distance (miles)	Target Site	<1/8	1/8 – 1/4	1/4 – 1/2	1/2 – 1	>1	Total
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
Delisted NPL	1.000		0	0	0	0	NR	0
NPL Recovery	TP		NR	NR	NR	NR	NR	0
CERCLIS	0.500		0	0	0	NR	NR	0
CERC-NFRAP	0.500		0	0	0	NR	NR	0
CORRACTS	1.000		0	0	0	0	NR	0
RCRA TSD	0.500		0	0	0	NR	NR	0

**TABLE 2
 FEDERAL DATABASE SEARCH**

Database	Search Distance (miles)	Target Site	<1/8	1/8 – 1/4	1/4 – 1/2	1/2 – 1	>1	Total
RCRA LQG	0.250		0	0	NR	NR	NR	0
RCRA SQG	0.250	X	0	2	NR	NR	NR	3
ERNS	TP		NR	NR	NR	NR	NR	0
HMIRS	TP		NR	NR	NR	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
US Brownfields	0.500		0	0	0	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0

TABLE 2 FEDERAL DATABASE SEARCH								
Database	Search Distance (miles)	Target Site	<1/8	1/8 – 1/4	1/4 – 1/2	1/2 – 1	>1	Total
MLTS	TP		NR	NR	NR	NR	NR	0
MINES	0.250		NR	NR	NR	NR	NR	0
FINDS	TP	X	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0

Acronyms – are defined in detail in the attached EDR Report, Appendix E
 TP=Target Property (the Site) NR=Not Requested at this Search Distance

5.1.1 RCRA Small Quantity Generator

RCRAInfo is United States Environmental Protection Agency’s (USEPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by RCRA. Conditionally exempt small quantity generators (CESQGs) generate less than 100 kilograms (kg) of hazardous waste, and less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste and less than 1 kg of acute hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kg of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste.

The USAR Center is listed as being a CESQG. The report states that no violations were found.

In addition to the USAR Center, there are 2 RCRA-SQG sites within the ASTM search radius.

Equal/Higher Elevation

- USWCOM Portland Troy Co 215, 2772 SW Troy St. (1/8-1/4 mi. SW)

Lower Elevation

- James F. Martin DMD, 2350 SW Multnomah Blvd. (1/8-1/4 mi. ESE)

The EDR report lists both of these locations as having no violations found. No additional information regarding RCRA status is available. Although USWCOM Portland Troy Co. is at a higher elevation, it is sufficiently distant to not be of concern to the USAR Center. James F. Martin is most likely cross or down gradient and does not pose a significant concern to the USAR Center.

5.1.2 Facility Index System/Facility Registry System (FINDS) Site

The FINDS List contains both facility information and “pointers” to other sources that contain more detail. The EDR report includes the following FINDS databases in this report: Permit Compliance System, Aerometric Information Retrieval System; Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes, Federal Underground Injection Control; Criminal Docket System used to track criminal enforcement actions for all environmental statutes; Federal Facilities Information System, State Environmental Laws and Statute, and Polychlorinated Biphenyl PCB Activity Data System.

According to the EDR report, the USAR Center is in the FINDS list. There is no specific additional information provided in the EDR report.

5.2 STATE AND LOCAL ENVIRONMENTAL RECORDS

The regulatory information presented below was obtained from the EDR State and Local regulatory database search report. Sites identified by this database search are discussed in the following subsections.

TABLE 3 STATE DATABASE SEARCH								
Database	Search Distance (miles)	Target Site	<1/8	1/8 – ¼	1/4 – 1/2	1/2 – 1	>1	Total
State Haz. Waset – ECSI	1.000		0	0	0	1	NR	1
OR CRL	1.000		0	0	0	0	NR	0
State Landfill	0.500		0	0	0	NR	NR	0
UIC	0.250		0	0	0	NR	NR	0

**TABLE 3
 STATE DATABASE SEARCH**

Database	Search Distance (miles)	Target Site	<1/8	1/8 – 1/4	1/4 – 1/2	1/2 – 1	>1	Total
HIST LF	0.500		0	0	0	NR	NR	0
LUST	0.500	X	9	12	101	NR	NR	123
AOC COL	1.000		0	0	NR	NR	NR	0
UST	0.250		0	2	NR	NR	NR	2
AST	0.250		NR	NR	NR	NR	NR	0
MANIFEST	0.250		0	0	0	NR	NR	0
OR SPILLS	TP		NR	NR	NR	NR	NR	0
OR HAZMAT	TP		NR	NR	NR	NR	NR	0
ENG CONTROLS	0.500		0	0	NR	NR	NR	0
INST CONTROL	0.500		NR	NR	NR	NR	NR	0
VCS	0.500		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
BROWNFIELDS	0.500		0	0	0	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
HSIS	TP		NR	NR	NR	NR	NR	0

Acronyms – are defined in detail in the attached EDR Report, Appendix E
 NR=Not Requested at this Search Distance

5.2.1 Environmental Cleanup Site Information System (ECSI)

The Environmental Cleanup Site Information System records information about sites in Oregon that may be of environmental interest. The data obtained in the EDR report came from the Oregon Department of Environmental Quality.

According to the EDR report, there is 1 site within the ASTM search radius.

- ODOT or State Hwy 1-2A Baldock, 9637 SW 35th Dr. (1/2-1 mi. SSW)

No additional information is available on the ESCI database, however, this site is topographically lower and most likely down gradient, and therefore it should not pose a significant concern to the USAR Center.

5.2.2 LUST - Leaking Underground Storage Tank List

Leaking Underground Storage Tank (LUST) Incident Reports records contain an inventory of reported leaking underground storage tank incidents. The data obtained in the EDR report was from the Oregon Department of Environmental Quality's LUST Database List.

The USAR Center is listed on the LUST database. Though no information, including date, is available on the database, it is presumed that the listing is related to the contaminated soils found during removal of the USTs.

According to the EDR report, there are 122 LUST sites within ASTM search radius of the Site. Of the 122 LUST cases listed on this database, 103 are listed as cleaned up. The vast majority of these are related to residential heating oil tanks. These sites should not pose a significant concern to the USAR Center.

18 of the remaining 19 properties are also associated with residential heating oil tanks and also should not pose significant concerns for the USAR Center. These properties are:

- B Bagwell, 2735 SW Moss (0-1/8 mi. N)
- Agnes Collin, 2906 SW Moss (0-1/8 mi. NNW)
- J Hansen, 2764 SW Hume Court (1/8-1/4 mi. S)
- Regan Conroy, 2827 SW Custer St. (1/4-1/2 mi. NNW)
- Graham-Roses, 2028 SW Moss (1/4-1/2 mi. ENE)

- J Brahms, 7401 SW Capitol Hwy (1/4-1/2 mi. NNW)
- George Berry, 2010 SW Custer Rd. (1/4-1/2 mi. NE)
- Walter Roth, 7225 SW 29th Ave. (1/4-1/2 mi. N)
- G Parker, 2912 SW Nevada (1/4-1/2 mi. N)
- Lyna Waggoner, 7255 SW 32nd Ave. (1/4-1/2 mi. NNW)
- Allen Reynolds, 8842 SW 35th (1/4-1/2 mi. SW)
- Theresa Parrone, 2607 SW Home Court (1/8-1/4 mi. SE)
- Benjamin Clapa, 3035 SW Hume Street (1/8-1/4 mi. WSW)
- M Delmain, 3128 SW Hume Street (1/8-1/4 mi. WSW)
- Shurgard Storage Lot, 8437 SW Barbur Boulevard (1/4-1/2 mi. SE)
- Donald Slaughter, 8600 SW 30th Avenue (1/4-1/2 mi. SSW)
- J Porter, 8901 SW 21st Avenue (1/4-1/2 mi. SE)
- Marigold Terrace Apartments, 3202-3236 Marigold Terrace (1/4-1/2 mi. SSW)

The following property is not associated with a residential heating oil tank:

- Barbur Texaco, 8604 SW Barbur Boulevard (1/4-1/2 mi. SSE)

Barbur Texaco is listed for an unleaded gasoline spill from a pipe leak in 1993. Additional information from the ODEQ shows that both soil and groundwater were affected. The ODEQ also reports that the spill has been delineated and cleanup commenced in 1993. Groundwater monitoring has been ongoing since 1998. This site is approximately 50 feet topographically lower than the USAR Center and is over ¼ mile south of the site, which most likely makes it down gradient. This property should not pose a significant concern to the USAR Center.

5.2.3 UST – Registered Underground Storage Tanks

USTs are regulated under Subtitle I of the RCRA and must be registered with the State department responsible for administering the UST program. The data obtained in the EDR report came from the Oregon Department of Environmental Quality's UST Site/Tank Report.

According to the EDR report, there are 2 UST sites within the ASTM search radius.

Equal/Higher Elevation

- USWest-Troy C O 010215, 2772 SW Troy St. (1/8-1/4 mi. N)

Lower Elevation

- USWest Falcon SOC 010746, 8033 SW 25th (1/8-1/4 mi. ENE)

Both sites are listed as having 2 registered USTs. No additional information is available. Both sites are over 1/8 mile from the Site, and should not pose a significant concern.

5.3 TRIBAL ENVIRONMENTAL RECORDS

The regulatory information presented below was obtained from the EDR's Tribal database search report.

TABLE 4 TRIBAL DATABASE SEARCH								
Database	Search Distance (miles)	Target Site	<1/8	1/8 – 1/4	1/4 – 1/2	1/2 – 1	>1	Total
Indian Reservation	1.000		0	0	0	0	NR	0
Indian LUST	0.500		0	0	0	NR	NR	0
Indian UST	0.250		0	0	NR	NR	NR	0

Acronyms – are defined in detail in the attached EDR Report, Appendix E
 NR=Not Requested at this Search Distance

According to the EDR report, no sites were located within the designated radius for each of the searched Tribal Databases.

5.4 EDR PROPRIETARY RECORDS

The regulatory information presented below was obtained from EDR's Proprietary Records database search report.

TABLE 5 EDR PROPRIETARY DATABASE SEARCH								
Database	Search Distance (miles)	Target Site	<1/8	1/8 – 1/4	1/4 – 1/2	1/2 – 1	>1	Total
Manufactured Gas Plants	1.000		0	0	0	0	NR	0

EDR Historical Auto Stations	TP		NR	NR	NR	NR	NR	0
EDR Historical Cleaners	TP		NR	NR	NR	NR	NR	0

Acronyms – are defined in detail in the attached EDR Report, Appendix E
 TP=Target Property (the Site) NR=Not Requested at this Search Distance

According to the EDR report, no sites were located within the designated radius for each of the searched EDR Proprietary Databases.

5.5 ENVIRONMENTAL REGULATORY AGENCY INQUIRIES

Information regarding the Site was requested from the following local government agencies. A summary of information obtained from the agencies contacted is presented below. Correspondence and information obtained from agencies will be provided in Appendix D.

The following divisions of the ODEQ were contacted to request environmental records available for the Site:

- Air Quality Program - An environmental records review was requested August 10, 2006 from the Division of Air Quality. The reply dated August 15, 2006, states that they had no environmental records for the Site.
- Division of Land/UST - An environmental records review was requested August 10, 2006 from the Division of Water Quality. The reply dated August 15, 2006, states that they had no environmental records for the Site.
- A public records request form was submitted to the ODEQ on August 17, 2006 and documents relating to the contaminant release related to the former USTs were mailed to Lawhon.

Information obtained from the ODEQ included a LUST Incident Form (dated July 8, 1993) indicates that an unknown quantity of soil had been impacted by a release from a UST(s) reported to store “bunker fuel.” A note at the bottom form indicates that that contaminated soil will remain in place until funding was approved for cleanup which correlates to the activities described in Section 3.5.2, which documents that a “Visqueen vapor barrier” was placed in the UST excavated area that had contamination and was backfilled with clean sand until removal of contaminated soils was performed in 1996.

Additional information received documented removal of all three USTs formerly located at the site.

5.6 UNMAPPED SITES

Thirty-five unmapped properties were included in the EDR report. Unmapped sites are those with insufficient address information such that they can only be identified as within the zip code of the target property. Based on a reconnaissance of the site vicinity, the unmapped properties were not within the applicable search radii or are duplicate listings and are discussed in the appropriate subsections of Section 5.

5.7 SUMMARY OF PROPERTIES EVALUATED TO DETERMINE RISK TO THE SITE

To summarize Subsections 5.1 through 5.6, six separate properties, in addition to the USAR Center, were evaluated as potential risk properties to the Site. The properties evaluated were identified as a result of information obtained during area reconnaissance and regulatory database searches and are listed below in Table 6.

TABLE 6				
PROPERTIES EVALUATED FOR POTENTIAL ENVIRONMENTAL RISKS				
Company/Site	Database	Elevation in Regards to Site	Potential Risk to Site?	Comment
USWCOM Portland Troy Co 215	RCRA-SQG	Equal/Higher	Low	No Violations, distant
James F. Martin DMD	RCRA-SQG	Lower	Low	No Violations, topographically lower and down gradient
ODOT OR State Hwy 1-2A Baldock	ECSI, LUST	Lower	Low	No Further Action, topographically lower and down gradient
Barbur Texaco	LUST	Lower	Low	Gasoline spill in 1993, groundwater monitoring ongoing since 1998; over ¼ mile from Site, topographically lower and down gradient.
US West – Troy C O 010215	UST	Equal/Higher	Low	2 Registered USTs, distant
USWest Falcon SOC 010746	UST	Lower	Low	2 Registered USTs, topographically lower, down gradient

Acronyms – are defined in detail in the attached EDR Report, Appendix E

Based on an evaluation of available site information and details concerning the properties listed in Table 6, none of the facilities evaluated are classified as “High Risk”. “High Risk” properties are those that exhibit significant environmental conditions that have the probability of adversely affecting the environmental conditions at another site.

6.0 SITE INVESTIGATION AND REVIEW OF HAZARDS

Findings documented in the following subsections are based on the September 8, 2006, Site visit and area reconnaissance, a review of available Site records, and information obtained from U.S. Army Reserve personnel. It should be noted that various areas throughout the Site, specifically within the OMS building where hazardous materials storage was reported in previous records reviewed for the Site, were inaccessible. In addition, facility personnel did not provide L&A with pertinent information with regards to the historical and current storage, use, and disposal practices conducted at the Site.

6.1 ABOVEGROUND STORAGE TANKS (AST)

No ASTs, larger than 55-gallon drums, are currently present on Site, and no information was observed to indicate that larger ASTs were previously used at the facility.

6.2 ASBESTOS CONTAINING MATERIAL

Limited information related to asbestos surveys performed at the Site was available for review and inclusion in this ECP Report. The Asbestos Survey performed by AGI (summarized in Section 3.5.3) indicated that a limited abatement project was conducted at the Site prior to 1994; however, no records or reports were obtained documenting this activity. ACMs reported present by AGI observed during the September 2006 Site visit included brown, black and light brown floor tile, which appeared to be as described in the survey. Pipe insulation above the ceiling tiles in the administration building, which is reported in the AGI Asbestos Survey to be friable, was not observed. Other materials assumed to be ACM containing reported by AGI observed the September 2006 Site visit included wall materials and insulated metal doors. The roof was not accessed during the September 2006 Site visit.

6.3 HAZARDOUS SUBSTANCES

Based on information supplied by the 70th RRC, the Site is listed as a CESQG based on the generation of waste from vehicle maintenance at the OMS. Typical wastes noted during the September 2006 Site visit were: used oily rags, used oil and oil filters, paint cans, used antifreeze, and other vehicle maintenance waste. Chemicals stored at the OMS include: containers of motor oil, antifreeze, brake fluid, gear oil, lubrication oil, multi-purpose grease, aerosol spray paints, as well as other typical vehicle maintenance materials.

As previously indicated, at the time of the Site visit, limited access to hazardous material storage areas was provided. One of two flammable storage cabinets in the OMS building, several rooms within the OMS building labeled as a "Battery Room," photo-processing areas, and a "Paint Room" in previous Site plans prepared for the Site, and the metal hazmat storage shed were locked and inaccessible at the time of the

September 2006 Site visit. In addition, facility personnel contacted during the Site visit did not have knowledge concerning the presence of hazardous materials stored in these areas. Information provided below is a summary of visual observations concerning the hazardous materials storage and housekeeping practices noted during the Site visit.

Used oil in the OMS building is stored within a portable plastic drum container (Photograph 18 in Appendix B). This container was locked and inaccessible at the time of the Site reconnaissance. Two flammable storage cabinets (Photograph 19 in Appendix B) were located within the OMS building. One of the cabinets was locked and inaccessible during the Site visit. Containers of brake fluid, oil, and coolant, lighter fluid, hydraulic oil, and other miscellaneous maintenance related were observed stored within their original retail containers ranging from 1-quart to 5-gallon capacities. No evidence of leaks or pooled liquids was noted at the base of the flammable storage cabinet accessed. A solvent sink (Photograph 18 in Appendix B), consisting of a sink over a 55-gallon drum, was also located within the OMS building. The concrete flooring in the immediate vicinity of the solvent sink was in good condition with no evidence of past spills. Two vehicle batteries situated on top of a work bench were also noted in the OMS building during the September 2006 Site visit.

The metal hazmat shed and three-sided hazmat storage structure are situated immediately east of the OMS building. Based on visual observations conducted during the Site reconnaissance, the hazmat storage structure (Photographs 21 and 22 in Appendix B) contained six 55-gallon drums, three of which were identified as containing antifreeze, grease, and oil; and approximately 20 empty and full 5-gallon containers of what appeared to be grease and oil. With the exception of two drums which were noted to be stored atop a spill containment pallet, the observed containers and hazardous substances within the three-sided hazmat storage structure were noted to be stacked rather haphazardly. In addition, a petroleum product (oil) smell and about an inch of oil was observed in a plastic tub noted in the hazmat storage structure through the locked chain link gate. Numerous containers of what appeared to be empty and full 5-gallon containers of oil were present sitting in the oil.

No other improper storage techniques or staining was noted in or around areas of observed stored hazardous materials. In addition, no violations are documented with regard to the facility's SQG hazardous waste permit. However, numerous deficiencies with regard to storage practices and administrative functions as related to record keeping have been noted in inspections conducted by the ODEQ (Section 3.5.8).

6.4 HYDRAULIC EQUIPMENT

Hydraulic equipment, such as hydraulic lifts that may incorporate oil reservoirs, were not observed during the Site visit. No historical use of this equipment was indicated by site personnel.

6.5 INDOOR FIRING RANGE

According to a report obtained from the 70th RRC (Section 3.5.4), an indoor firing range (IFR) was formerly located on the first floor of the administration building. At the time of the September 2006 Site reconnaissance, this room was observed to be utilized as a class room (Photograph 8 in Appendix B). Reportedly the firing range had been converted for use as storage and had been encapsulated with a concrete slab after its use had been discontinued for many years. Random dust samples collected from the ductwork in 1994 did not indicate the presence of lead and it was concluded that the Site “is free of lead contamination due to past use as a firing range”, based on qualitative analysis.

6.6 LEAD-BASED PAINT (LBP)

According to information provided by the 70th RRC, there are no documented lead-based paint surveys or abatement projects at the Site. Based on the date of construction (1960), it is likely that LBP exists in the administration and OMS buildings. During the 2006 site visit, painted surfaces within the administration building and OMS appeared to be in fair to good condition.

6.7 MUNITIONS AND EXPLOSIVES OF CONCERN (MEC)

No indications were found during the site visit or records review process of the past presence of MEC, including unexploded ordnance. A locked small arms vault is located within the administration building. According to Site personnel there is a locked area within the vault containing approximately 20 rounds of small arms ammunition.

6.8 NEARBY PROPERTIES

Potential environmental sites of concern, located within corresponding ASTM search radius distances from the Site, were evaluated (Section 5.0). None of the facilities evaluated are classified as “High Risk”. “High Risk” properties are those that exhibit environmental conditions that have the probability of adversely affecting the environmental conditions at this Site or another property. A visual reconnaissance during the September 2006 Site visit of the surrounding area supports these conclusions.

6.9 OIL/WATER SEPARATOR

One OWS is located in the eastern portion of the Site. The information presented below is based on the Draft Survey of Drains, Pollution Control Equipment, and Discharge Points and on observations during the September 2006 Site visit. Water that discharges to storm drains located throughout the Site are intercepted by this OWS which reportedly flows to the City of Portland maintained storm sewer system. The

OWS is reportedly inspected and serviced by an outside contractor when needed. No odors or staining were detected in or around the drainage systems during the 2006 Site reconnaissance.

6.10 PITS, SUMPS, DRYWELLS, AND CATCH BASINS

With the exceptions of an inactive grease trap associated with a former kitchen and a sump that is reportedly located within the three-sided hazmat storage structure, no pits, drywells or catch basins were observed or reported to be located at the Site.

Based on information provided by the 70th RRC, a grease trap is located in the former kitchen area. Reportedly the grease trap was sealed in 2002 when the kitchen was converted to an office and no additional information was available.

According to information provided by the 70th RRC, liquid from a sump located within the three-sided hazmat storage structure was sampled on June 22, 2004 by Philips Environmental. Laboratory analysis of the samples was conducted by NCA Labs and results were documented in a laboratory report dated June 30, 2004. No detectable concentrations of total petroleum hydrocarbon (TPH) constituents were found above the laboratory reporting limits.

6.11 POLYCHLORINATED BIPHENYL CONTAINING (PCB) EQUIPMENT

Based upon information provided by the 70th RRC, there is no known PCB containing equipment at this facility; however, PCBs may be contained in light ballasts in older type light fixtures. Based on the construction date of the buildings it is possible that some of these ballasts could potentially contain PCBs. Any light ballast not marked with "No PCBs" should be managed as if they contain PCBs, and management and disposal of these light ballasts must be in accordance with Local, State and Federal requirements.

6.12 PCB TRANSFORMERS

One pad-mounted and three pole-mounted electrical transformers are located at the Site. According to 70th RRC personnel, the pad-mounted transformer, which is located north of administration building, does not contain PCBs. The three pole-mounted transformers are located on the southwest corner of the Site. No labels, stickers or indication of the presence or non-presence of PCBs was observed on these transformers during the Site visit. According to a 1989 Army site report, the pole-mounted transformers were installed in 1960 and have not been tested for PCBs. These transformers are owned and maintained by Portland General Electric. Any issue relating to these units would be the responsibility of Portland General Electric. A visual inspection of the transformers during the September 2006 Site visit revealed no evidence of leaks or spills

6.13 RADIOLOGICAL MATERIALS

During the September 2006 site visit and records review process, no indications were found of the past storage or use of radiological commodities at the USAR Center.

6.14 RADON

Information provided by the 70th RRC shows that a radon survey was performed at the site in 1991. Based on the sampling results, no locations sampled exhibited radon levels above the USEPA's recommended maximum allowable exposure level of 4 pCi/l. Radon surveys are currently being performed at facilities within the 70th RRC by Shaw Environmental Group. The radon surveys commenced in July 2006 and results are currently not available.

6.15 UNDERGROUND STORAGE TANKS

No petroleum USTs are currently present on the Site. Site records indicate that three heating-oil USTs were historically located on the Site. The USTs were removed in 1993. Soil contamination associated with these USTs remains at the Site.

6.16 WASTE DISPOSAL SITES AND ACTIVITIES

There were no signs of land-filling or illegal waste disposal activities at the Site during the September 2006 Site visit. Non-hazardous waste management, such as used oil, is removed from the Site on an as-needed basis by an outside contractor and hazardous wastes and empty aerosol cans (e.g., spray paints) are off-hauled by a private contractor assigned by the DRMO on an as-needed basis. The on-Site solvent sink is serviced by Safety Kleen on a monthly basis.

7.0 REVIEW OF SPECIAL RESOURCES

7.1 LAND USE

Figure 20 in Appendix A provides a 1994 aerial photograph of the USAR Center and surrounding properties and depicts current land use. The Site is zoned R1 – Residential; the general nature of the area is residential with some small commercial businesses situated to the southeast beyond SW Multnomah Avenue.

7.2 COASTAL ZONE MANAGEMENT

According to information reviewed on-line at the Oregon Coastal Management Program's website (http://egov.oregon.gov/LCD/OCMP/CstZone_Intro.shtml), the Site does not lie within a coastal zone management area.

7.3 WETLANDS

According to the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory map, no jurisdictional wetland areas are identified on the Site or adjacent properties. During the September 2006 Site visit, no cattails and other vegetation indicative of saturated areas were observed at the Site.

7.4 100-YEAR FLOOD PLAIN

A review of the FEMA digital Flood Hazard Area map indicates that the Site lies outside the 100-year and 500-year flood plains. Figure 8 in Appendix A provides a map depicting the extent of the nearest 100-year flood plain in relation to the Site.

7.5 NATURAL RESOURCES

No Site specific survey addressing natural resources was available for review. Based on discussions with the environmental program manager under contract with the 70th RRC, Environmental Program Manger with ICI, LLC, there are no issues of environmental concern related to natural resources at the Site. No threatened and endangered species lists were available.

7.6 CULTURAL RESOURCES

Based on discussions with the environmental program manager under contract with the 70th RRC and review of the U.S. Army Reserve Integrated Cultural Resources Management Plan, Historic Properties Component, there is neither cultural or traditional religious significance nor historic properties identified at the Site. Furthermore, the Site is not identified in the National Register Information System database.

8.0 CONCLUSIONS

Lawhon & Associates, Inc. in conjunction with FMSM was contracted to prepare an ECP report for the Sgt. Jerome F. Sears U.S. Army Reserve Center (OR010) located at 2731 SW Multnomah Boulevard, Multnomah County, Portland, OR. The tract of land is irregularly shaped and encompasses approximately 4 acres. The Site consists of four permanent buildings: a main administrative building, an OMS building, a storage building, and a three-sided cinderblock hazmat structure. In addition to the permanent structures, the Site has one metal, hazmat storage shed.

The USAR Center is currently occupied by 364th Civil Affairs Brigade and the 320th Psyop Company. The Site has been a USAR Center since the administration building and OMS were constructed in 1960. In 2002, renovations were completed in the administration building, and in 2004 renovation of the drill hall were completed. The United States of America owns the land and the buildings.

Findings of this ECP are based on interviews, existing environmental information, including visual observations, site records, Federal, State, and Local database and file information, related to the storage, release, treatment, or disposal of hazardous substances or petroleum products or derivatives on the property. The following paragraphs present the findings related to areas of potential environmental concern that were evaluated during the ECP process.

- **Aboveground Storage Tanks (ASTs)** - ASTs are not present at the Site. There are no records or indications that any ASTs have historically been present at the Site.
- **Asbestos Containing Materials (ACMs)** - An Asbestos Survey of the Site was performed by AGI Technologies (AGI), in May 1994. According to this report, a limited abatement project was conducted at the Site prior to 1994; however, no records were obtained documenting the locations and quantities of removed ACM. During AGI's inspection of the Site, friable and non friable ACM was present in the administration building (pipe insulation above the ceiling tile is reported as friable); and material observed in the OMS was assumed to be ACM.
- **Hazardous Substances** – Chemicals containing Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substances may have been used and stored at the Site in amounts necessary to support unit-level and vehicle and building maintenance activities, including: paints, sealants, adhesives, aerosols, and solvents. However, the quantities stored would not have exceeded corresponding CERCLA threshold planning quantities. There is no evidence that chemicals used or stored were improperly handled, released, or disposed of at the Site.

No violations are documented with regard to the facility's Conditionally Exempt Small Quantity Generator (CESQG) hazardous waste status. However, numerous deficiencies with regard to storage practices and administrative functions as related to record keeping have been noted in inspections conducted by the ODEQ. Based on a visual inspection, it appears that proper secondary containment housekeeping practices should be implemented to prevent a future release of hazardous materials.

- **Indoor Firing Range (IFR)** – Historically, the Site operated an indoor firing range. In June 1994 a range removal and abatement was performed by Performance Abatement Services. Sometime prior to abatement and removal, the sand pit area had been converted for use as storage, and had been encapsulated with a concrete slab. A 1994 report following testing after the removal and abatement concluded that the Site was now free of any accessible lead contamination due to past use as a firing range, however, lead dust in non-ductwork areas had been encapsulated by paint during room renovation. Significant levels of lead, therefore, may be present in or beneath the paint. The area now acts as a training classroom.
- **Lead-Based Paint (LBP)** - According to information provided by the 70th RRC, there are no documented LBP surveys or abatement projects at the Site. Based on the date of construction of the administration and OMS buildings (1960), it is likely that LBP exists in the structures. In addition, elevated levels of lead in paint may be present in the former IFR due to the encapsulation of lead dust. During the September 2006 Site visit, painted surfaces in the administration and OMS buildings appeared to be in fair to good condition.
- **Munitions and Explosives of Concern (MEC)** - No indications were found during the site visit or records review process of the past presence of MEC, including unexploded ordnance. A locked small arms vault is located within the administration building. According to Site personnel there is a locked area within the vault containing approximately 20 rounds of small arms ammunition.
- **Nearby Properties** - Potential environmental sites of concern, located within corresponding ASTM search radius distances from the Site were evaluated. Overall, none of the sites evaluated exhibit environmental conditions that have a significant probability to adversely affect environmental conditions at the Site.
- **Oil/Water Separator (OWS)** – There is one OWS on the Site located in a grassy area east of the administration building, adjacent to SW 25th Avenue. Existing Site drainage is collected through a series of storm drains in paved and unpaved areas which go to the OWS. The OWS was installed around 1993, and drains

offsite to a City of Portland storm sewer. The OWS is reportedly inspected and serviced by an outside contractor when needed.

Historically, an OWS was present and associated with a former vehicle wash rack, located west of the OMS. This area is now part of the asphalt paved MEP area. Records indicate that the wash rack was removed in 1998. The documentation available for this report does not specify if the OWS was removed, but it does state that the drain was capped. Because of the proximity of the OWS to the wash rack, it is likely that it was removed.

- **Petroleum Product Storage** – Petroleum product storage occurs and historically would have occurred in designated areas within the OMS building, the three-sided cinder block hazmat structure, and the metal storage shed. In addition, a historic report describes a Petroleum, Oil, and Lubricant (POL) storage cage located in the northeast corner of the Site, which is not currently present. At the time of the September 2006 Site visit limited access to hazardous material storage areas was provided, however, approximately twenty 5-gallon and six 55-gallon drums of typical vehicle maintenance products (motor oil, antifreeze, brake fluid, gear oil, lubrication oil, multi-purpose grease, etc.) were observed through the locked chain link gate in the three-sided hazmat storage structure. In addition, a locked plastic, portable 55-gallon drum container, principally for used and waste product, was observed in the OMS during the September 2006 Site visit.

Some of the 55-gallon drums were noted to be stored atop a spill containment pallet, however many of the observed petroleum products within the hazmat storage structure were noted to be stacked haphazardly on the concrete floor, and in a plastic tub which appeared to contain about an inch of oil. No other improper storage techniques or staining was noted in or around areas of observed stored hazardous materials.

- **Pits, Ponds, Sumps, Drywells, and Catch Basins** - A 2004 Survey of Drains, Pollution Control Equipment, and Discharge Points identified 12 exterior surface drains, and an OWS at the Site. In addition, seven interior floor drains are located within the mechanical room and a former kitchen area. A grease trap is also located in the former kitchen area; however, it is now inaccessible due to renovations.

According to the report, the interior drains are tied into the City's sanitary sewer system. The report states that most likely the grease trap also discharges to the sanitary sewer system. Nine of the exterior drains ultimately go to the OWS and join the city storm sewer. Two of other three exterior drains are associated with a stair-well and a can wash station, where cans from the kitchen would have been

washed, and are reported to connect to the city sanitary sewer off-site. The third drain which doesn't connect to the OWS flows east offsite where it joins a storm sewer.

According to information provided by the 70th RRC, a sump is situated within the three-sided hazmat storage structure at the Site. Access to the interior area of the structure was not available during the September 2006 Site visit and visual observations of this area were performed from outside of the locked chain link gate. The sump was not observed.

- **Polychlorinated Biphenyls (PCB) Equipment** - Based upon information provided by the 70th RRC, there is no known PCB containing equipment at this facility; however, PCBs may be contained in light ballasts in older type light fixtures. Based on the construction date of the buildings it is possible that some of these ballasts could potentially contain PCBs. Any light ballast not marked with "No PCBs" should be assumed to contain PCBs and management and disposal of these light ballasts must be in accordance with Local, State and Federal requirements.
- **Polychlorinated Biphenyls (PCB) Transformers** - One pad-mounted and three pole-mounted electrical transformers are located at the Site. According to 70th RRC personnel, the pad-mounted transformer, which is located north of the administration building, does not contain PCBs. The three pole-mounted transformers are located on the southwest corner of the Site. No labels, stickers or indication of the presence or non-presence of PCBs was observed on these transformers during the Site visit. According to a 1989 Army site report, the pole-mounted transformers were installed in 1960 and have not been tested for PCBs. These transformers are owned and maintained by Portland General Electric.
- **Radiological Materials** - Facility personnel indicated that to their knowledge the Site never had a Nuclear Regulatory permit. Most military facilities will have some low level radiological materials associated with the illumination of various types of military equipment (e.g., watch dials, compasses, aiming circles, etc). There is no evidence to suggest that any radiological commodities were ever improperly managed at the Site, or that any radionuclides were ever released.
- **Radon** - Information provided by the 70th RCC shows that a radon survey was performed at the site in 1991. Based on the sampling results, no locations sampled exhibited radon levels above the USEPA's recommended maximum allowable exposure level of 4 pCi/l. Radon surveys are currently being performed at facilities within the 70th RRC by Shaw Environmental Group. The radon surveys commenced in July 2006 and results are currently not available.

- **Underground Storage Tanks (USTs)** - No petroleum USTs are currently present on the Site. Site records indicate that three heating-oil USTs were historically located on the Site, and all were removed in 1993. Contaminated soils were associated with the USTs, which were excavated in remedial efforts performed in May 1996. According to Site records, a total of 98.21 tons of petroleum contaminated soil, 1,735 gallons of groundwater, and 30 gallons of mud were removed from the area north of administration building. Subsequent tests showed contaminated soil still existed. A vapor barrier was placed in the pit, which was then backfilled with clean sand. A 2 foot layer of soil was placed over the sand and the area was leveled and seeded. Detectable concentrations of residual contaminants in groundwater were below regulatory designated cleanup standards.
- **Wash Water Discharge** - A former vehicle wash rack and an accompanying OWS was situated west of the OMS building. Historically, wastewater collected through the wash rack drain, discharged to the OWS situated by the wash rack, and ultimately to the city storm sewer. According to information provided by the 70th RRC, use of the wash rack was discontinued and it was removed, and the drain capped, by an outside contractor in 1998. No information was available regarding removal of the adjacent OWS. Currently, vehicles are washed with water only, on a concrete pad outside the south bay door of the OMS. Wash water discharges to a nearby storm drain which carry it to the OWS installed around 1993 on the eastern part of the Site and into the city storm sewer.

In accordance with Department of Defense policy defining the classifications (See Deputy Under Secretary of Defense Goodman Memorandum dated 21 October 1996), the Site has been classified as Category 2, an area or parcel of real property where only the release or disposal of petroleum products or their derivatives has occurred. This classification is based on the contaminated soil associated with former heating oil USTs.

9.0 LIMITATIONS

This ECP Report was prepared to review certain elements of the environmental condition of property related to the storage, release, treatment, or disposal of hazardous substances or petroleum products. It documents efforts to determine or discover the presence or likely presence of a release or threatened release of these materials. Project activities were performed in general conformance with the BRRM, ASTM D6008 guidance, the project prescribed scope of work, and generally accepted practices in the consulting industry. The degree of care and skill is consistent with that generally exercised in the industry under similar conditions.

Lawhon & Associates, Inc., has relied on certain information provided by the USACE, USAR, and other parties referenced in the report. This information was assumed to be accurate and complete unless information to the contrary arose during the course of the investigation. Historic documentation (e.g., information on past environmental practices, environmental records, USARC operational changes, unit and equipment changes, chemical/substance inventories and storage, current as-built drawings, etc.) and facility personnel knowledge regarding chemicals used or stored on the Site and the quantities stored, was often limited or non-existent. Therefore, statements regarding storage of chemicals or presence of hazardous substances reflect best available data and are not warranted for either completeness or accuracy over the history of the facility.

In preparing this report, Lawhon & Associates, Inc., was required to review previous documents from other sources (collectively referred to herein as the Prior Reports). The Prior Reports may present findings regarding the abatement or remediation of *known* concerns at the time of their preparation or within the limit of the project scope of work. The Prior Reports may include statements or opinions of the original authors of the Prior Reports as to the satisfactory completion of work. Lawhon & Associates, Inc., notes that environmental laws and regulations, including abatement or remedial action levels, are periodically reviewed and updated by the various regulatory agencies and may have changed since the respective dates of the Prior Reports.

Lawhon & Associates, Inc. has summarized certain of the Prior Reports in fulfilling the project prescribed scope of work. This summarization may include statements or opinions as to the satisfactory completion of work. These statements or opinions are those of the original report authors. Lawhon & Associates, Inc. neither warrants nor certifies the accuracy or completeness of these statements. The summarization of previous documents has not reviewed or updated those conclusions with regards to actions from the time of that document to date, current regulatory agency abatement, or remedial standards. Rather, this summary provides the original author's conclusions at the time the report was prepared. Evaluation of the completeness of previous

documents or statements of abatement or remediation is beyond the current scope of service included in this contract.

A limited site reconnaissance was performed to visually identify materials or conditions representing recognized adverse environmental conditions. Identification of hidden conditions, observation of the effects of activities or incidents occurring after completion of the reconnaissance, buried conditions, conditions obscured by dense foliage, conditions beneath buildings, other structures, or covered by building/paving materials, or conditions otherwise obscured, is beyond the scope of this work. The conditions described in this report are valid only at the time that the observations were made. Some conditions may change with time.

The findings and conclusions contained in this report are based in part on the information available at the time of the study. The findings and conclusions should be considered not as scientific certainties, but as probabilities based on professional judgment of the significance of the limited data gathered in the course of the site evaluation, interviews and literature review. If additional or corrected information becomes available, Lawhon & Associates, Inc., requests the opportunity to review/modify conclusions, as warranted.

10.0 REFERENCES

10.1 PERSONS CONTACTED

- Mr. Patrick Marchman, Environmental Program Manager, ICI, LLC, U.S. Army Reserves 70th Regional Readiness Command, (206) 301-2091, September 8, 2006.
- Major Maenhardt, Facility Manager, Sgt. Jerome F. Sears USAR Center, Portland, Oregon, (360) 695-4766, September 8, 2006.
- Mr. Bill J. Schell, Facility Operation Specialist, Sgt. Jerome F. Sears US Army Center, Portland, Oregon, (360) 695-4766, September 8, 2006.
- Mr. Clark Niewendorp, Minerals Resource Geologist, Oregon Department of Geology and Mineral Industries, March, 2007.

10.2 RESOURCES CONSULTED

- Environmental Data Resources, Inc. (EDR) Report for the Jerome F. Sears USAR Center, July 14, 2006.
- Federal Regulatory Databases
 - National Priorities List (NPL), April 19, 2006
 - Proposed NPL Sites, April 19, 2006
 - Delisted NPL Sites, April 19, 2006
 - Federal Superfund Liens (NPL Liens), October 15, 1991
 - Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), February 1, 2006
 - CERCLIS No Further Remedial Action Planned Sites (NFRAP), February 1, 2006
 - Resource Conservation and Recovery Information System (RCRIS) Corrective Action Sites (CORRACTS), March 15, 2005
 - Resource Conservation and Recovery Act Information (RCRA), March 9, 2006
 - Emergency Response Notification System (ERNS), December 31, 2005

- Engineering Controls Sites List (US ENG CONTROLS), March 21, 2006
- Listing of Brownfields Sites, April 26, 2006
- Superfund Consent Decrees, December 14, 2004
- Records of Decision (ROD), March 13, 2006
- Department of Defense Sites, December 31, 2004
- Uranium Mill Tailings Sites, November 4, 2005
- Open Dump Inventory (ODI), June 30, 1985
- Toxic Chemical Release Inventory System (TRIS), December 31, 2003
- Toxic Substances Control Act (TSCA), December 31, 2002
- FIFRA/TSCA Tracking System, March 29, 2006
- FTTS INSP, March 31, 2006
- Section 7 Tracking Systems (SSTS), December 31, 2004
- Integrated Compliance Information System (ICIS), February 13, 2006
- PCB Activity Database System (PADS), December 27, 2005
- Material Licensing Tracking System (MLTS), April 12, 2006
- Mines Master Index File (MINES), February 9, 2006
- Facility Index System/Facility Registry System (FINDS), April 27, 2006
- RCRA Administrative Action Tracking System (RAATS), April 17, 1995
- Biennial Reporting System (BRS), December 31, 2003
- State and Local Regulatory Databases
 - Environmental Cleanup Site Information System, May 01 2006
 - Confirmed Release List and Inventory, March 15, 2006
 - Solid Waste Facilities List, April 11 2006

- Underground Injection Control Program Database, April 27, 2006
- Old Closed SW Disposal Sites, April 1, 2000
- Leaking Underground Storage Tank Database, January 12, 2006
- Area of Concern: Columbia Slough, October 3, 2002
- Area of Concern: East Multnomah County Area, October 7, 2002
- Underground Storage Tank Database, January 3, 2006
- Aboveground Storage Tanks, January 1, 2006
- Manifest Information, December 31, 2004
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10.3 AGENCIES CONTACTED

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- Oregon Department of Environmental Quality, Land Quality Division, 811 SW 6th Avenue, Portland, Oregon, August 10, 2006.
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