

***FINAL***

**ENVIRONMENTAL CONDITION OF  
PROPERTY REPORT**

**PFC JOE E. MANN  
U.S. ARMY RESERVE CENTER WA032  
4415 NORTH MARKET STREET  
SPOKANE, WA 99207**

***Prepared For:***

**U.S. Army Corps of Engineers – Louisville District  
Engineering Division – Environmental Engineering Branch  
600 Dr. Martin Luther King, Jr. Place  
Louisville, Kentucky 40202-2232**

**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.

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**STEPHEN A. RIVERA**  
**Environmental Division ARIM**  
**Chief Environmental Division**  
**70th Regional Readiness Command**

**DATE**

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



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**LENARD GUNNELL, P.G.**  
**Project Geologist**  
**U.S. Army Corps of Engineers**

**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 Pfc. Joe E. Mann U.S. Army Reserve Center (Facility ID WA032), hereafter referred to as the "Site" or "USAR Center." The Site is located at 4415 North Market Street, Spokane County, Spokane, Washington, and encompasses approximately 7 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 7 acres of land, located in a predominantly commercial and residential area, in the City of Spokane, Washington. The Site consists of two permanent buildings: a 27,237 square-foot administration building and a 10,289 square-foot area maintenance and support activity (AMSA #80) shop (Note: in different drawings, figures and reports the AMSA shop is referred to as the organizational maintenance shop (OMS), AMSA, or both. For this report AMSA will be used). The USAR Center is currently occupied by the 981<sup>st</sup> Medical Detachment, the 396<sup>th</sup> Medical Detachment (Storage), the 643<sup>rd</sup> (Training), the 22<sup>nd</sup> Legal Defense Organization Trial Defense Services, and AMSA #80.

Based on a review of aerial photographs dating back to 1982 and U.S. Geological Survey (USGS) topographic maps dating back to 1901, the Site has served as a USAR Center since 1953 when the administration and AMSA buildings were constructed. 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. Records indicate petroleum contaminated soils were encountered and removed during the 1991 removal of a former heating oil underground storage tank (UST). In addition, Washington Department of Ecology (WDOE) records show that there was a 250-gallon release of unleaded fuel in 1992 due to an auto/truck incident. The specific location on the Site was not identified; however, the report does state that the spill occurred on an asphalt

area. WDOE reported fuel had penetrated the asphalt to the soils below. Soil sampling and remediation activities are not reported.

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
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
CSCSL	Confirmed and Suspected Contaminated Sites List
DOCKET	Enforcement Docket
DOD	Department of Defense
DRMO	Defense Reutilization Marketing Office
ECP	Environmental Condition of Property
EDR	Environmental Data Resources, Inc.
E2M	Engineering-Environmental Management, Inc.
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.
FURS	Federal Underground Injection Control
HSWA	Hazardous and Solid Waste Amendments
IFR	Indoor Firing Range
kg	Kilogram
KPFF	KPFF Consulting Engineers
Lawhon	Lawhon & Associates, Inc.
LQG	Large Quantity Generator
LBP	Lead Based Paint
LUST	Leaking Underground Storage Tank
MEC	Munitions and Explosives of Concern
MEP	Military Equipment Parking
NFA	No Further Action
NPL	National Priorities List
OMS	Organizational Maintenance Shop
OWS	Oil/Water Separator
PADS	PCB Activity Data System
PCB	Polychlorinated Biphenyls
PCS	Permit Compliance System
pCi/l	PicoCuries per Liter of Air
POL	Petroleum, Oil, and Lubricant

POV	Privately Owned Vehicle
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
RQ	Reportable Quantity
RRC	Regional Readiness Command
Site	U.S. Army Reserve Center WA032
SOW	Scope of Work
SQG	Small Quantity Generator
STATE	State Environmental Laws and Statute
TSD	Treatment, Storage, or Disposal
TPH	Total Petroleum Hydrocarbons
TSCA	Toxic Substances Control Act
ug/sf	Micrograms per square foot
USACE	United States Army Corps of Engineers
USAR	United States Army Reserve
USATHAMA	U.S. 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
WDOE	Washington Department of Ecology

## 1.0 INTRODUCTION

Lawhon & Associates, Inc., Columbus, Ohio was authorized to prepare an Environmental Condition of Property report for the Pfc. Joe E. Mann U.S. Army Reserve Center (WA032). The facility is located at 4415 North Market Street, Spokane County, Spokane, Washington, 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 6, 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 7-acre USAR Center located at 4415 North Market Street, Spokane County, Spokane, Washington. The property is located near the northwest corner of Market Street. Market Street borders the Site on the east, Heroy Avenue to the north and Haven Street to the west. Haven Street merges with North Market Street at the southern tip of the Site. Site maps are provided in Appendix A. Appendix B provides photographs taken during the September 2006 site visit. Appendix C provides the environmental lien documents for the property and chain of title 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 within the city limits of Spokane, Washington in a primarily commercial and residential area. Figure 1 in Appendix A provides a general site location map.

### 2.2 ASSET INFORMATION

Facility Name and Address: Pfc. Joe E. Mann U.S. Army Reserve Center WA032  
4415 North Market Street  
Spokane, WA 99207

Property Owner: The United States Government owns the land and buildings.

Date of Purchase: May 1, 1947

Current Occupants:

- 981<sup>st</sup> Medical Detachment
- 396<sup>th</sup> Medical Detachment (Storage)
- 22<sup>nd</sup> Legal Defense Organization Trial Defense Services
- 643<sup>rd</sup> (Training)
- AMSA 80

Zoning: CC2 – Center/Corridor – Commercial/Residential

County, State: Spokane County, Washington

USGS Quadrangle(s): Spokane NE, Washington

Section/Township/Range: Section 3, Township 25 North, Range 43 East

Latitude/Longitude: 47° 41' 52.1"; 117° 21' 54.0"

Legal Description: Lots 1 through 12 of Block 97; Lots 1 through 12 of Block 86; and Lots 1, 2, 3, 4, 12 and portions of Lots 5, 6, 8, 9, 10 and 11 of Block 83; all in North Minnehaha Addition, situated and lying in the

Northwest ¼ of the Northwest ¼ of Section 3,  
Township 25 North, Range 43 East of the Willamette  
Meridian, City and County of Spokane, State of  
Washington. Assessor's Parcel No: 35032.2301

### **2.3 PHYSICAL DESCRIPTION**

The USAR Center is situated on approximately 7 acres of land with two permanent structures: a 27,237 square-foot main administration building and a 10,289 square-foot AMSA shop. Construction of the administration building and AMSA shop occurred in 1953. An addition was added on the administration building in 1974. Since 1974, several renovations have occurred, but the configuration of the buildings has basically remained the same. The AMSA shop underwent a number of renovations, with the most recent being the addition of a metal rectangular structure in 2001.

Both original structures consist of decorative brick over CMU building block. Both buildings rest upon concrete foundations. A military equipment parking (MEP) area and a privately owned vehicle (POV) parking area are present at the Site. Photograph 3 in Appendix B provides a view of the POV area. Photographs 5 and 6 in Appendix B provide views of the MEP area. Chain-link security fencing topped with barbed wire encloses the Site. In addition, chain-link security fencing topped with barbed wire separates the POV area from the main administration building, MEP area, and AMSA shop. Approximately 80% of the Site is covered by impervious surface features (e.g., asphalt parking areas, driveways, concrete walkways, building footprints, etc.). Lawn, gravel and a sparse population of landscape shrubs and trees cover the remaining ground surface. Topographically, the Site is relatively flat and contains little relief. 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.

The original 1953 portion of the administration building consisted of a two-story, rectangular structure, attached to a one-story rectangular structure and a one and a half story drill hall structure. An addition in 1974 included adding a second floor to the original one-story structure, as well as adding a new one-story rectangular structure. The USAR Center is currently an irregular-shaped structure with one- and two-story administration sections, and a one-and a half-story drill hall. Photograph 1 in Appendix B provides a southwest view of the exterior of the building. Photograph 2 in Appendix B provides a west (front) view of the exterior of the building. The interior of the administration building consists of office space, classrooms, kitchen area, storage areas, and a drill hall. A locked arms vault is located within the administration building. Site personnel stated that no ammunition is stored or located at the Site. The basement of the administration building contains offices and storage space, but also is the site of a former dental office and indoor firing range (IFR). Photographs 10, 11, 29, 37 and 39 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 AMSA shop is a one-story, irregular shaped structure, with a second level mezzanine balcony along the south end of the western wall. The shop is comprised of five service bays, an oil distribution room, a battery room, and other miscellaneous material, office, and equipment storage areas. Five overhead metal, retractable doors are located on the east wall of the buildings. Photographs 4, 9, and 13 in Appendix B show exterior views of the AMSA shop. Photographs 7, 12, 21, and 28 in Appendix B show the interior of the AMSA shop. Figure 5 in Appendix A provides a layout of the interior of the AMSA shop.

Slotted floor drains run along the east wall just outside the AMSA shop, in front of three of the bay doors. These drain to the city sanitary sewer system.

Numerous and a variety of vehicles were located within the MEP area during the September 2006 Site visit. In addition, 3 hazardous material (hazmat) sheds and numerous non-permanent metal Container Express (CONEX) structures were located in the MEP area south of the AMSA shop (see Photographs 5 and 14 – 17 in Appendix B).

One 250-gallon, double-walled concrete used aboveground storage tank (AST) is present near the southwest corner of the AMSA shop (Photograph 8 in Appendix B). In addition, the AMSA shop has three plastic, portable 55-gallon drum containers, principally for used and waste product.

## **2.4 SITE HYDROLOGY AND GEOLOGY**

### **2.4.1 Surface Water Characteristics**

Figure 6 in Appendix A provides a portion of the 1986 Spokane, Washington, USGS topographic map, which includes the Site. As shown, the Site is situated at an elevation of approximately 2,037 feet above mean sea level and is relatively flat.

Surface water runoff at the Site is directed towards drains situated in paved and unpaved portions of the Site, and to stormwater drains in adjoining roadways. Additional information concerning the drains at the Site is discussed below in Section 3.5.9. Surface water reportedly discharges to the City of Spokane sanitary sewer system.

No surface water features are located in the immediate vicinity of the site. The Spokane River is the closest surface water feature to the Site and is located over a mile south. The Spokane River flows generally west into the Columbia River and eventually to the Pacific Ocean.

According to the EDR Report which references the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, Community Panel 5301830003B, the Site is not included in either the 100-year flood plain elevation or the 500-year flood plain elevation. The EDR Overview Map in the EDR report located in Appendix E provides a map depicting the extent of the nearest 100-year and 500-year flood plain in relation to the Site.

## **2.4.2 Geology/Hydrogeological Characteristics**

According to the Washington State Department of Natural Resources Geology of Washington website (<http://www.dnr.wa.gov/geology/columbia.htm>), the Spokane area is situated in the northern part of the Columbia Basin physiographic region. The Columbia Basin, also known as the Columbia Plateau, is a vast area in eastern Washington, southwestern Idaho, and northern Oregon. Incised rivers, extensive plateaus, and anticlinal ridges rising to 4,000 feet above sea level characterize the physiographic province. The region is underlain by Miocene Columbia River Basalt Group rocks and interbedded Neogene terrestrial sediments.

Locally, at least 200 feet of pre-Wisconsin age glacial outwash (primarily gravel and sand) underlies the Site. Groundwater depth within this area is generally deep, with many nearby borings encountering groundwater at depths greater than 100 feet. This does not preclude the existence of small quantities of shallower, perched groundwater.

No information regarding direction of groundwater flow is available within a 1-mile radius of the Site, according to the EDR report. However, based on topography and the location of the Spokane River, groundwater flow most likely is to the south towards the river.

According to information in the EDR Report acquired from the Soil Conservation Service's (Natural Resource Conservation Service) State Soil Geographic Database for Spokane County, Washington, specific types of soil at the Site consist of the Spokane series. This soil component does not meet the requirements for hydric soils.

The surface soils are loams. These soil types have slow infiltration rates with layers impeding downward movement of water and are characterized as soils with moderately fine or fine textures. In a typical profile, the surface layer is approximately 9 inches thick and is a loam. The subsoil is approximately 16 inches thick and is gravelly-coarse sandy loam.

## **2.5 SITE UTILITIES**

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

**Sanitary Sewer System** – The City of Spokane 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.), vehicle washing runoff, and stormwater.

**Gas & Electric** – Avista Utilities Company provides electric service to the Site. Site personnel did not know the name of the gas provider.

## **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 eleven wells located within a 1-mile radius of the Site. None of the wells are directly adjacent to the Site. The purpose of the wells includes private, irrigation, industrial and observation. No information regarding contamination of the wells is presented in the state and federal databases presented in the EDR report in Appendix E. No public water supply wells are located within 1 mile of the Site.

### **3.0 SITE HISTORY**

#### **3.1 HISTORY OF OWNERSHIP**

Land titles for the Site were reviewed back to 1943. Appendix C contains Chain of Title and Environmental Lien reports completed for the Site. The Environmental Lien report did not identify any environmental liens against the USAR Center property. According to historical documentation, the United States of America purchased the property in 1947.

Available business directories including City, cross-reference, and telephone directories were reviewed, if available, at approximately five-year intervals for the years spanning 1964 through 2006. According to a City Directory provided by EDR and dated July 24, 2006, the address of the USAR Center was first listed in the research source (Polk's City Directory) in 1969 as the US Army Reserve Center. The Site is also listed in the 1964 Polk's City Directory as US Dept. of Army Reserve Center (Spokane Subsector Command) and in 1996 and 2006 as the US Army Reserve Hospital and Reserve Recruiting. A copy of the City Directory is included in Appendix E.

#### **3.2 PAST USES AND OPERATIONS**

In 1947, the U.S. Government purchased the 7 acre property from the United States of America, acting by and through the National Housing Agency for construction of the USAR Center. Historical information sources and personnel interviews suggest that the Site was formerly a vacant parcel prior to the construction of the USAR Center.

The USAR Center including the AMSA shop was originally constructed in 1953. It serves as a reserve center, transportation (AMSA), and combat support/hospital preventative maintenance. The Site was also occupied by an engineering division approximately 10 years ago.

Currently and historically, the AMSA shop has been utilized to perform maintenance activities on military equipment. Activities inside the shop include routine vehicle maintenance, including checking vehicle fluids such as motor oil, transmission fluid, brake fluid, and antifreeze, and other routine maintenance activities, including brake changes and tune ups.

Historic documents, personnel interviews and historical aerial photographs and topographic maps, and a Sanborn Map were the primary sources of information on the past use and operations at the Site. Figures 6 - 13 in Appendix A provide USGS topographical maps and aerial views of the Site and surrounding areas in 1901, 1950, 1963, 1972, 1973, 1982, 1986, and 1991.

The 1980 Sanborn Map (Figure 14 in Appendix A) shows the administration building situated on the northeast portion of the Site. The northwestern portion of the Site is developed with the original portion of the AMSA shop. The southern portion of the site has an equipment and truck storage yard similar to the present day MEP and POV areas.

The 1901 and 1950 USGS topographical maps (Figures 9 and 10 in Appendix A) are at a scale that does not show the Site.

The 1963 USGS topographical map (Figure 8 in Appendix A) shows buildings present on the Site.

The 1973 USGS topographical map (Figure 7 in Appendix A) shows the main administration building and the AMSA shop. Hillyard (currently a Head Start Preschool and the Institute for Extended Learning) is west of the Site. There are various other buildings and developed land surrounding the Site.

The 1986 USGS topographic map (Figure 6 in Appendix A) shows minimal change from the 1973 USGS topographic map.

The 1972 (Figure 13 in Appendix A), 1982 (Figure 12 in Appendix A), and 1991 (Figure 11 in Appendix A) aerial photographs are at a scale that does not show the Site.

### **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. Vehicle maintenance and petroleum, oil, and lubricant (POL) products were stored within the designated POL areas in the AMSA shop, or one of the three hazmat sheds.

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 one 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 very minor signs of staining and no noxious or foul odors were noted during the Site visit.

Information provided by the Washington Department of Ecology (WDOE) shows that there was a 250-gallon release of unleaded fuel in July 1992 due to an auto/truck incident. The specific location on the Site was not identified; however, the report does state that the spill occurred on an asphalt area at or near the USAR Center. WDOE reported fuel had penetrated the asphalt to the soils below.

### **3.4 PAST PRESENCE OF BULK PETROLEUM STORAGE TANKS**

One 250-gallon, double-walled concrete used oil AST is present near the southwest corner of the AMSA shop. Site personnel indicated that one or more ASTs had been present in the past, but the exact location(s) was unknown.

No USTs are currently present on the Site. Historically, two heating oil USTs, one 1,000-gallon and one 3,000-gallon, were located at the USAR Center. Both of these tanks were removed in 1991. One of the tank cavities exhibited contaminated soils, which were removed at the time of the tank removals. The State Leaking Underground Storage (LUST) database reports that the Site was cleaned up dated 7/1992 (Section 3.5.2). In addition, an approximately 300-gallon UST for waste oil, antifreeze, solvents, brake fluid, etc. was historically present at the Site. This UST was removed in 1997. Soil samples taken at the time of excavation showed levels below the Washington Model Toxics Control Act cleanup levels.

The 1,000-gallon heating oil UST was located at the southeast corner of the AMSA shop very near the vehicle wash area. The location of the 3000-gallon heating oil UST is unknown, except that it was below concrete. The approximately 300-gallon waste product UST was located near the northeast corner of the AMSA shop, which is now lawn.

### **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 May 1989, U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) Property Report Database Printout**

This 1989 facility data report identifies twelve areas of hazardous materials;

- 1,000-gallon heating oil UST (the report states that it was installed in 1958, and not leak tested);
- Brake changing area (the report states that no vacuum or procedures are used during brake jobs);
- Parts Cleaner with 20-gallons of solvent (the report states that this unit is not contractor serviced, and waste solvent is added to a mixed waste UST);
- Solvent storage cabinet with 1, 55-gallon drum of dry cleaning solvent (the report states that this is a flammable cabinet);
- POL storage building with 250-gallons of oil, paint, antifreeze, fuel additive, and grease (the report states that this building is a cinder block building on a concrete pad at the edge of the parking lot);
- 350-gallon mixed waste UST (report states that this is a single wall, steel tank built before 1976, and has not been leak tested);
- Solvent storage area with 2, 55-gallon drums of dry cleaning solvent (report states that these drums are stored outside on a pallet in an unpaved area);
- Grease rack (report states that this had not been used in many years);
- Vehicle wash rack and oil/water separator (OWS) (report states that the OWS is emptied approximately every 2 years by facility personnel and disposal is believed to be in the 350-gallon mixed waste UST);
- Indoor firing range with lead fragments and dust;
- 3,000-gallon heating oil UST (report states that it was installed in 1958 and had not been leak tested).

### **3.5.2 1992 Underground Storage Tank Field Report and Tank Removal Manifest**

In May of 1991, Pegasus Environmental Management Services, Inc. was contracted to perform underground storage tank removals for a 1,000-gallon and a 3,000-gallon UST at the Site. A pre-job inspection was made, during which it was discovered that the

1,000-gallon UST had already been removed from service and filled with sand. Pegasus evacuated, excavated, removed, cleaned, and transported the USTs for scrap during the period December 17-20, 1991. Samples of sand and sludge from the USTs site were collected and conveyed to the US Army Corps of Engineers, North Pacific Division Laboratory. Analysis of soil samples revealed a pocket of heavy oil contamination at the bottom of one of the UST excavations. Corrective Action was implemented in July of 1992, removing 73 cubic yards of soil. A Hanby Field Test Kit showed cleanup standards were obtained.

### **3.5.3 1997 Above Ground and Waste Oil Storage Tank Removals Report**

This report prepared by MTH, Inc., documents the removal of ASTs and USTs from several facilities. The report provides detail of the removal of an approximate 300-gallon double walled, steel, mixed waste UST from the Mann USAR Center in October 1997. The report states that there was no visible evidence of contaminated soils prior to and during excavation. Eight soil samples were collected from the tank excavation as required by WDOE and analyzed. The report concluded that several of the samples reflected detectable levels of volatile organic compounds, pesticides, and metals. These detectable levels, however, were below the State of Washington Model Toxics Control Act cleanup levels. No further inquiry was recommended.

### **3.5.4 2002 Range Cleanup Report and Range Cleaning Clearance Certificate**

An IFR was present in the basement of the USAR Center administration building. Based on documentation provided in the Range Cleanup Report conducted by IT Corporation in September 2002, the firing range was cleaned and all sand and dust was removed from the former range. After cleaning, eight dust wipe samples were collected on April 16, 2001. After initial cleaning, the samples showed the lead levels were below the clearance criteria of 200 micrograms per square foot (ug/sf). Via a letter dated April 20, 2001 (letter included in Appendix D within this referenced report) to the USAR Center, the facility was notified that the clearance levels were attained and that the range could be reoccupied.

### **3.5.5 2003 Lead Paint Identification Survey**

Thermatech Northwest, Inc. conducted a lead paint inspection on March 17, 2003. A walk-through inspection of all areas was performed to identify which paints were to be tested. After identifying the paint to be tested, chip and scrape samples were collected, placed in plastic bags, numbered and recorded. The samples were analyzed for total lead using the EPA Method 7240. Test results indicated the presence of varying amounts of lead in paint throughout the facility. The highest concentrations were found in red primers used on metal railings in stairwells and orange primers used on doorframes. Roll-up garage doors of the AMSA shop also exhibited high concentrations of lead.

### **3.5.6 2003 Good Faith Asbestos Survey**

On March 17, 2003 Thermatech Northwest, Inc. conducted a "Good Faith" Asbestos Survey of the Site. A walk-through inspection of all areas was performed to identify building materials that may have the potential for containing asbestos. Upon completion of the survey and review of laboratory data, the following asbestos containing materials (ACM) were identified in the administration building, including friable asbestos in one location (no ACM was found in the AMSA shop):

- Offices, Classroom, Back Portion of the Equipment Room and the Janitor's Closet in the hall of the main facility – Brown/White/Red 9x9 floor tile and mastic;
- X-Ray room and the hearing test room of the medical wing – Black tile & mastic;
- Medical Wing – Off-white/brown tile and mastic;
- Chaplain's Office – Black mastic associated with the pink tile;
- Medical Wing and West Portion of the Main Hall – Dark brown glue dots associated with the 12x12 ceiling tile;
- Drill Hall and Equipment Room – Vibration dampers associated with the ventilation systems (friable asbestos was present in the dampers);
- Throughout Facility – Dark brown cove base mastic;
- Administration Area – Black mastic associated with the tan-brown tile;
- No asbestos found in the motor pool (AMSA shop).

The report recommended abatement and disposal, as well as additional asbestos sampling of any hidden or covered suspect materials discovered during demolition or renovation.

### **3.5.7 2004 Long Term Radon Survey Results**

MCS Environmental, Inc. conducted radon sampling from July 23 through October 22, 2004 in twelve different areas of the USAR Center. This report concluded that radon was present in all samples above detection limits; however all were below the USEPA's recommended maximum allowable exposure level of 4 picoCuries per liter of air (pCi/l). Shaw Environmental Group is currently performing radon surveys at facilities within the 70th Regional Readiness Command (RRC). The radon surveys commenced in July 2006 and results are currently not available.

### **3.5.8 May 1993, Oil/Water Separators and Storm Drainage System Improvements**

KPFF Consulting Engineers (KPFF) prepared this report (dated May 21, 1993) for numerous USAR Center locations throughout Oregon and Washington. At the time of this report, stormwater runoff from the site drained in two separate methods. The first was a system, which drains the area between the AMSA shop and the administration building. This system passed through an existing OWS and then outfalls to a manhole in Haven Street. The second system drained the northern portion of the POV and MEP areas. This runoff collected in a series of drains and piped off site to the same manhole in Haven Street. In addition, the south area of the property drained using a series of interconnected drywells.

The report provides information on upgrades which generally describes the current OWS systems observed during the September 2006 Site visit depicted in the a 2004 Draft Drain Survey (3.5.9). Three OWS are identified in the report, and three drywells in the vicinity of the southern most OWS.

### **3.5.9 September 2004, Draft Survey of Drains, Pollution Control Equipment, and Discharge Points**

A 2004 Survey of Drains, Pollution Control Equipment, and Discharge Points identified twelve exterior surface drains, one sump, three dry wells, and three OWS at the Site. In addition, ten interior floor drains are identified, four in the mechanical room, and two in the kitchen area of the administration building, and four in the AMSA shop. Two grease traps are also located in the kitchen area.

The administration building interior drains are tied into the city's sanitary sewer system. The report states that the grease traps also discharge to the sanitary sewer system. No interior drains are reported to go through an OWS.

All exterior drains, except two are reportedly tied to one of the three OWS. The two drains that do not connect to an OWS are located directly adjacent to the administration building; one at the bottom of a stairwell, and one associated with an exterior can wash where kitchen cans are cleaned. These eventually drain to the city sanitary sewer system.

The southern half of the Site is served by four exterior drains that flow to one of the OWS, and then to one of three drywells depending on how heavy stormwater runoff is. The three drywells have gravel bottoms and slotted sides for infiltration of stormwater runoff.

### **3.5.10 2003 Stormwater and Assessment Guidance**

The objective of this project was to analyze regulatory and facility information, create decision-making guidance, and make recommendations for the 70th Regional Readiness Command.

The document discusses the following features at the Area Maintenance Support Activity 80 in 1993 at the time of this assessment:

- AMSA 80 is collocated with Mann AR Center, which occupies approximately 5.5 acres;
- The AMSA includes an vehicle maintenance shop, vehicle wash rack, and MEP; much of the MEP is asphalt paved, and the balance is gravel;
- The maintenance shop includes five work bays, a POL storage room, and various other storage rooms and offices; according to RRC environmental staff, a long trench drain just outside the work bay doors discharges through the wash rack OWS into the local sanitary sewer system; the shop is also equipped with a POL dispensing system;
- The vehicle wash rack is not curbed or covered; it drains through an oil/water separator into the local sanitary sewer system;
- Potentially polluting materials are primarily stored outside at one of two double-floored storage sheds (the other is not in use), inside the shop work bays, or in/around the shop POL storage room (flammable storage cabinets or individual containers); used oil is accumulated into a 300-gallon double walled convault; other wastes (POL, batteries) are accumulated outside (within hazmat sheds) or inside the shop (within spill containment pallets);
- Spent/waste products are disposed of by certified contractors;
- Preventive maintenance, visual inspection, and drip-pan programs are very poor; housekeeping is also poor; drip pans are rarely used and inspections are infrequent;
- Spill supplies are readily available;
- According to RRC records, no environmental management plans have been prepared for the facility;
- According to RRC staff, stormwater from the facility discharges as sheet flow into facility drain inlets, which discharge through an oil/water separator into a series of

dry wells at the southern end of the USAR Center; however, facility engineering plans appear to show that some storm drain inlets, the wash rack, and the shop trench drain connect into the sanitary sewer system along Haven Street; according to the plans, storm drains at the northern end of the MEP discharge directly into the sanitary sewer, while the trench drain and wash rack discharge through an oil/water separator before connecting into the sanitary lines; additional engineering plans do show storm drains at the southern end of the MEP connecting to a dry well at the southern corner of the USAR Center.

Recommendations from this report include the following suggestions:

- Conduct drainage and compliance assessment of facility to verify drainage connections and determine permitting status;
- Improve preventive maintenance, housekeeping, and visual inspection programs by strengthening training and preparing/enforcing Standard Operating Procedures;
- Improve command emphasis to enforce proper management habits;
- After improving on-site management activities, investigate eligibility for no-exposure exemption;
- Determine whether facility drains into a regulated MS4, and maintain MS4 contact information if applicable; and
- Prepare environmental management plans as required; consider removing vehicle wash rack.

### **3.5.11 March 2005, Final PCB-Containing Equipment Inventory Summary Report, Spokane Area and Pasco Area Facilities**

Engineering-Environmental Management, Inc. (E2M) prepared this report for the 70<sup>th</sup> RRC in order to comply with the Toxic Substances Control Act (TSCA) and AR 200-1. This report provides an inventory of equipment at the Site that contains PCBs. According to this report, electrical power is supplied to the facility from three pole mounted transformers. All are operated and maintained by the Avista Utilities Company. Two are located at the northwest corner of the Site, while the third is located at the southeast corner of the facility fence.

According to the report, Avista replaced the transformers in 1980 following the Mount St. Helens eruption and in 1996 following a heavy ice storm. In addition, a fluorescent light fixture in the administration building training room was inspected. The ballast in the fixture was labeled "No PCBs".

The report states that fixtures were installed or renovated at different times since 1990 with the most recent renovation occurring in 2004. Engineering-Environmental Management, Inc. stated that no further action is needed for this Site.

#### 4.0 ADJACENT PROPERTIES

Figure 11 in Appendix A provides a 1991 aerial view of the Site and adjacent properties. Residences are located to the north and west of the Site and businesses are located to the south and east of the Site. Due to the altitude that the photographs were taken, it is not possible to describe site-specific details on the aerials. Table 1 provides a list of adjacent properties with their directional location in regards to the Site. Photographs 30 through 33 in Appendix B provide views of adjacent properties and surrounding land use.

<b>TABLE 1 LIST OF ADJACENT PROPERTIES</b>			
<b>Direction From Site</b>	<b>Name/Type of Property</b>	<b>Address</b>	<b>Zoning</b>
North	Residences	Various	CC2 (Center/Corridor-Commercial/Residential)
South	Taco Bell	Unknown	CC2 (Center/Corridor-Commercial/Residential)
East	Hillyard Pre School	4410 N. Market St.	CC2 (Center/Corridor-Commercial/Residential)
West	Residences	Various	CC2 (Center/Corridor-Commercial/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. "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
<b>Delisted NPL</b>	<b>1.000</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>NR</b>	<b>1</b>
NPL Recovery	TP		NR	NR	NR	NR	NR	0
CERCLIS	0.500		0	0	0	NR	NR	0
<b>CERC-NFRAP</b>	<b>0.500</b>		<b>0</b>	<b>2</b>	<b>1</b>	<b>NR</b>	<b>NR</b>	<b>3</b>
<b>CORRACTS</b>	<b>1.000</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>NR</b>	<b>1</b>
RCRA TSD	0.500		0	0	0	NR	NR	0
RCRA LQG	0.250		0	0	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
<b>RCRA SQG</b>	<b>0.250</b>	<b>X</b>	<b>0</b>	<b>3</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>4</b>
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
<b>CONSENT</b>	<b>1.000</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>NR</b>	<b>1</b>
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
MLTS	TP		NR	NR	NR	NR	NR	0

<b>TABLE 2 FEDERAL DATABASE SEARCH</b>								
<b>Database</b>	<b>Search Distance (miles)</b>	<b>Target Site</b>	<b>&lt;1/8</b>	<b>1/8 – 1/4</b>	<b>1/4 – 1/2</b>	<b>1/2 – 1</b>	<b>&gt;1</b>	<b>Total</b>
MINES	0.250		NR	NR	NR	NR	NR	0
<b>FINDS</b>	<b>TP</b>	<b>X</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>1</b>
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 Delisted NPL (National Priorities List)**

The National Oil and Hazardous Substances Pollution Contingency Plan establishes criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate.

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

- Spokane Junkyard/Associated Properties., 3322 N. Cook St. (1/2-1 SSW)

This site is topographically lower, down gradient, and sufficiently distant from the USAR Center to pose any significant concerns.

### **5.1.2 CERCLIS-NFRAP**

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of USEPA's knowledge, assessment at a site has been completed and that USEPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listed at a late time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

According to the EDR report, there are 3 CERC-NFRAP sites within the ASTM search radius.

- Aluminum Recycling Corp., 3412 E. Wellesley (1/8-1/4 NNE)
- Union Carbide Linde Div., 4020 N. Market St. (1/8-1/4 S)
- Burlington Northern Hillyard., 3205 E. Queen (1/4-1/2 N)

These sites are all topographically lower, cross or down gradient, and sufficiently distant from the USAR Center to pose any significant concerns.

### **5.1.3 CORRACTS**

CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows that nationally defined corrective action core events have occurred for every handler that has had corrective action activity.

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

- Washington Chemical, 3828 E. Queen (1/2-1 NE)

This site is topographically lower and sufficiently distant from the USAR Center to pose any significant concerns.

### **5.1.4 RCRA Small Quantity Generator**

RCRAInfo is USEPA's 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, or 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 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 conditionally exempt RCRA small quantity generator. The report states that no violations were found.

In addition to the USAR Center, there are 3 RCRA-SQG sites within the ASTM search radius.

### **Equal/Higher Elevation**

- Spokane School District Skills Center, 4141 N. Regal (1/8-1/4 SW)

The Spokane School District Skills Center is listed as having four General Requirement violations, all showing informal written enforcement. All violations are listed as attaining compliance by 5/2005.

### **Lower Elevation**

- Union Carbide Linde Div., 4020 N. Market St. (1/8-1/4 S)

Union Carbide is listed as having no violations.

- Oxarc Incorporated, 4020 N. Market St. (1/8-1/4 S)

Oxarc is listed as having no violations.

The Spokane School District Skills Center is at approximately equal elevation to the Site. All of these sights are located closer to the Spokane River, and are most likely down gradient. They should not cause significant concern for the USAR Center.

### **5.1.5 CONSENT**

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by the U.S. District Courts after settlement by parties to litigation matters.

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

- Spokane Junkyard/Associated Properties, 3322 N. Cook St. (1/2-1 SSW)

This site is topographically lower, down gradient, and sufficiently distant from the USAR Center to pose any significant concerns.

### **5.1.6 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: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System); DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control); C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes); FFIS (Federal Facilities Information

System), STATE (State Environmental Laws and Statute), and PADS (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.

<b>TABLE 3 STATE DATABASE SEARCH</b>								
<b>Database</b>	<b>Search Distance (miles)</b>	<b>Target Site</b>	<b>&lt;1/8</b>	<b>1/8 – 1/4</b>	<b>1/4 – 1/2</b>	<b>1/2 – 1</b>	<b>&gt;1</b>	<b>Total</b>
<b>CSCSL</b>	<b>1.000</b>		<b>0</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>NR</b>	<b>5</b>
HSL	1.000		0	0	0	0	NR	0
<b>CSCSL NFA</b>	<b>0.500</b>		<b>0</b>	<b>1</b>	<b>0</b>	<b>NR</b>	<b>NR</b>	<b>1</b>
State Landfill	0.500		0	0	0	NR	NR	0
SWTIRE	0.500		0	0	0	NR	NR	0
<b>LUST</b>	<b>0.500</b>	<b>X</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>NR</b>	<b>NR</b>	<b>2</b>
<b>UST</b>	<b>0.250</b>	<b>X</b>	<b>0</b>	<b>2</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>3</b>
AST	0.250		0	0	NR	NR	NR	0
<b>MANIFEST</b>	<b>0.250</b>	<b>X</b>	<b>0</b>	<b>1</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>2</b>
SPILLS	TP		NR	NR	NR	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
ICR	0.500		0	0	0	NR	NR	0

<b>TABLE 3 STATE DATABASE SEARCH</b>								
<b>Database</b>	<b>Search Distance (miles)</b>	<b>Target Site</b>	<b>&lt;1/8</b>	<b>1/8 – 1/4</b>	<b>1/4 – 1/2</b>	<b>1/2 – 1</b>	<b>&gt;1</b>	<b>Total</b>
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
WA Emissions	TP		NR	NR	NR	NR	NR	0
INACTIVE DRYCLEANERS	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

### **5.2.1 CSCSL - Confirmed & Suspected Contaminated Sites List**

The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS. Priority sites planned for cleanup using state funds (state equivalent to Superfund) are identified along with sites where potentially responsible parties will pay for cleanup. The data comes from the Department of Ecology's Confirmed & Suspected Contaminated Sites list.

According to the EDR report, there are 5 sites within the ASTM search radius.

#### **Equal/Higher Elevation**

- Koch Materials Company, 4327 N. Thor St. (1/4-1/2 E)

#### **Lower Elevation**

- BNSF Railway Black Tank Proper, 3202 E. Wellesley (1/8-1/4 NNE)
- BN SF RR Bunker C Spill Area, Freya/E. Longfellow (1/4-1/2 E)
- Burlington Northern Hillyard., 3205 E. Queen (1/4-1/2 N)
- Sicilia Trucking, 5523 N. Julia (1/2-1 NE)

Koch Materials, is listed as being 4 feet higher in elevation than the Site, and is most likely cross or down gradient. It is also ¼ mile distant. It should not pose a significant concern to the USAR Center.

The remaining four sites are at a lower elevation and cross or down gradient to the Site and should not pose significant concerns to the USAR Center.

### **5.2.2 CSCSL No Further Action (NFA)**

This database includes information about sites previously on the Confirmed and Suspected Contaminated Sites list that have received a No Further Action (NFA) determination. Because it is necessary to maintain historical records of sites that have been investigated and cleaned up, sites are not deleted from the database when cleanup activities are completed. Instead a NFA code is entered based upon the type of NFA determination the site received.

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

- Union Carbide Linde Div., 4020 N. Market St. (1/8-1/4 S)

This site is topographically lower, down gradient, and sufficiently distant from the USAR Center to pose any significant concerns.

### **5.2.3 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 Department of Ecology's Leaking Underground Storage Tanks Site List.

The USAR Center is on the LUST list from 1991. This listing is associated with the soils removed when 2 USTs were taken out. The status of the Site is listed as "reported cleaned up", dated 7/1992.

In addition, according to the EDR report, there is 1 LUST site within the ASTM search radius.

- Spokane School District #81, 2815 E. Garland (1/4-1/2 SW)

This site is topographically lower, down gradient, and sufficiently distant from the USAR Center to pose any significant concerns.

#### **5.2.4 UST – Registered Underground Storage Tanks**

UST's 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 Department of Ecology's Statewide UST Site/Tank Report.

According to the EDR report, the USAR Center is on the UST database. Information shows that 1 heating fuel UST and 1 used/waste oil UST were removed. Date of removals is not listed; however the contractor report (Section 3.5.2) shows a date of May, 1991.

There are 2 additional UST sites within the ASTM search radius.

##### **Equal/Higher Elevation**

- T.K. Qwik Stop, 3021 E. Wellesley Ave. (1/8-1/4 NNW)

##### **Lower Elevation**

- Vern E. Ziegler/Ziegler Lumber, 4220 N. Market St. (1/8-1/4 S)

This listing is for registered USTs, and not indicative of any problems.

The Qwik Stop is most likely up gradient from the Site, but no problems have been reported with this location. Vern Ziegler Lumber is most likely down gradient from the Site. These sites should not cause a concern for the USAR Center.

#### **5.2.5 MANIFEST Listing**

This database is maintained by the WDOE and is a collection of facilities that have reported Hazardous Waste Manifest Data information. Inclusion on this list is not indicative of a release.

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

- Spokane School District Skills Center, 4141 N. Regal (1/8-1/4 SW)

The Spokane School District Skills Center is at approximately equal elevation to the Site. This site is located closer to the Spokane River, and is most likely down gradient. It should not cause significant concern for the USAR Center.

### 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.

WDOE was contacted to request environmental records available for the Site. The following information was provided:

A 2 page initial spills report was provided by the WDOE showing that there was a 250-gallon release of unleaded fuel in July 1992 due to an auto/truck incident. The specific location on the Site was not identified; however, the report does state that the spill occurred on an asphalt area. WDOE reported fuel had penetrated the asphalt to the soils below. Soil sampling and remediation activities are not reported. No additional information could be located (see Appendix D).

In addition, WDOE stated they had TCP LUST-UST and Hazardous Waste Compliance files. The most significant file was a report prepared by MTH, Inc., which documents the removal of a ASTs and USTs from several facilities. The report provides detail of the removal of an approximate 300-gallon double walled, steel, mixed waste UST from the Mann USAR Center in October 1997. Additional details of the report are presented in Section 3.5.3 of this report, (also in Appendix D).

## **5.6 UNMAPPED SITES**

Thirteen 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 our 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, fourteen 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.

<b>TABLE 6</b>				
<b>PROPERTIES EVALUATED FOR POTENTIAL ENVIRONMENTAL RISKS</b>				
<b>Company/Site</b>	<b>Database</b>	<b>Elevation in Regards to Site</b>	<b>Potential Risk to Site?</b>	<b>Comment</b>
Spokane Junkyard/Associated Properties	Delisted NPL, CONSENT	Lower	Low	No Issues, down gradient and distant
Aluminum Recycling Corp.	CERCLIS-NFRAP	Lower	Low	No Issues, cross or down gradient, and distant
Union Carbide Linde Div.	CERCLIS-NFRAP, RCRA-SQG, CSCSL-NFA	Lower	Low	No Violations, cross or down gradient, and distant
Burlington Northern Hillyard	CERCLIS-NFRAP, CSCSL	Lower	Low	No Violations, cross or down gradient, distant
Washington Chemical Inc.	CORRACTS	Lower	Low	21 Violations, No Further Action Status, topographically lower and distant
Spokane School District Skills Center	RCRA-SQG, MANIFEST	Equal/Higher	Low	4 Violations, No Further Action Status, equal elevation and down gradient
Oxarc Incorporated	RCRA-SQG	Equal/Higher	Low	No Violations, down gradient
Koch Materials Company	CSCSL	Equal/Higher	Low	No Violations, No Issues, cross or down gradient, distant
BNSF Railway Black Tank Property	CSCSL	Lower	Low	Remedial Action Being Completed, topographically lower and down gradient
BN SF Bunker C Spill Area	CSCSL	Lower	Low	Awaiting Remedial Action –No date provided on EDR report, topographically lower and down gradient

<b>TABLE 6</b>				
<b>PROPERTIES EVALUATED FOR POTENTIAL ENVIRONMENTAL RISKS</b>				
<b>Company/Site</b>	<b>Database</b>	<b>Elevation in Regards to Site</b>	<b>Potential Risk to Site?</b>	<b>Comment</b>
Sicilia Trucking	CSCSL	Lower	Low	No Issues, topographically lower and down gradient
Spokane School District #81	LUST	Lower	Low	Reported Cleanup of LUST, 2 USTs removed, topographically lower and down gradient
T.K. Qwik Stop	UST	Equal/Higher	Low	Tanks Operational and No Violations
Vern E. Ziegler/Ziegler Construction	UST	Lower	Low	3 USTs removed, No Violations, 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 6, 2006, site visit and area reconnaissance, a review of available site records, and information obtained from U.S. Army Reserve personnel.

### **6.1 ABOVE GROUND STORAGE TANK**

One 250-gallon, double-walled concrete used oil AST is present near the southwest corner of the AMSA shop. Site personnel indicated that one or more ASTs had been present in the past, but the exact location(s) was unknown. The tank itself shows staining; however, no stains or evidence of spills or release on the ground around the tank were observed during the September 2006 Site visit.

### **6.2 ASBESTOS CONTAINING MATERIAL**

Asbestos surveys have been performed at the Site (see Section 3.5.6), and records indicate that ACM are present only in the administration building. During the Site visit facility personnel indicated that there had been a recent water pipe break in the administration building boiler room. The insulation in the area of the break had been damaged (Photograph 10 in Appendix B). No records of the area being evaluated by a qualified ACM professional since the break were available. In the adjacent vent/air conditioning room there were large areas of loose or missing floor tiles (Photograph 11 in Appendix B). ACM listed as friable in vibration dampers was not closely observed during the Site visit due to the location of the dampers in the administration building drill hall.

### **6.3 HAZARDOUS SUBSTANCES**

Visual and physical inspections for hazardous substances and petroleum products were also conducted. The USAR Center is listed under USEPA as RCRA-CESQG. RCRA-CESQGs generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Based on information supplied by the 70<sup>th</sup> RRC, the Site is listed as a RCRA-CESQG due to the generation of waste from vehicle maintenance at the AMSA shop. Typical wastes noted during the Site reconnaissance were: used oily rags, used oil and oil filters, paint cans, used antifreeze, diesel fuel, and other vehicle maintenance waste. Chemicals stored at the AMSA shop include: diesel fuel, motor oil, brake fluid, gear oil, lubrication oil, multi-purpose grease, aerosol spray cans, as well as other typical vehicle maintenance fluids.

Hazardous materials stored at the Site were observed in three hazmat sheds, three portable 55-gallon drum containers, and within the AMSA shop (Photographs 12-16 and

20 in Appendix B). The hazmat sheds are located south of the AMSA shop on the west side of the Site. The portable 55-gallon drum containers are located near the east side of the AMSA shop.

Numerous CONEX storage units are present south of the AMSA shop, but they reportedly contain non-hazardous, unit and company supply materials such as helmets and tents, etc (Photograph 17 in Appendix B).

Used automotive batteries are stored in a battery storage room in the west central part of the AMSA shop. The batteries are stored on benches without secondary containment, or on the floor with a battery spill pad (Photograph 18 in Appendix B). A bermed wash and drain area is present in the battery room. White stains inside and outside the wash area were observed (Photograph 19 in Appendix B). In addition, used alkaline batteries and used battery clamps are stored in a caged area in the southwest corner of the AMSA shop (Photograph 20 in Appendix B).

In the administration building cleaning supplies are kept in designated janitor supply closets, and in the kitchen. Water treatment chemicals (sodium hydroxide) are kept in the boiler room.

Part of the activities at the USAR Center includes combat medical support/preventative medicine. As such, some medical supplies, including small quantities of isopropyl alcohol are kept in storage areas and offices in the administration building. Medical training is performed at the Site, but no medical (biological) waste is generated. All medical activity waste is disposed of as standard solid waste.

According to Site personnel, hazardous substances are not stored at the Site in excess of 1-year. The substances are picked up routinely by, and removed to, Fairchild Air Force Base for appropriate disposal.

Based on visual inspection, it appears that petroleum products and other hazardous materials are being handled properly at the Site, and storage of these relatively small quantities do not appear to pose an environmental threat to the Site at this time.

#### **6.4 HYDRAULIC EQUIPMENT/GREASE RACK**

Hydraulic equipment, such as a hydraulic lift/grease rack, that may incorporate oil reservoirs, is currently not present at the USAR Center. According to Site personnel and a 1989 Army property report (Section 3.5.1), a hydraulic lift/grease rack was historically located in the AMSA shop, which is no longer present. Site personnel were uncertain when it was removed. The 1989 report states that it was present then, but had not been used in many years.

## **6.5 INDOOR FIRING RANGE**

An IFR historically was present in the basement of the administration building (Photograph 37 in Appendix B). Based on documentation provided by the 70<sup>th</sup> RRC, the firing range was cleaned and all sand and dust was removed from the former range. The room was remodeled and is currently used for study/training with multiple computer workstations.

## **6.6 LEAD-BASED PAINT**

According to a prior lead based paint (LBP) survey there are varying levels of lead in the paint in the administration and AMSA buildings. During the 2006 Site visit, painted surfaces within the administration and AMSA buildings appeared to be in fair to good condition.

## **6.7 PITS, SUMPS, DRYWELLS, AND CATCH BASINS**

Twelve exterior surface drains, one sump, three dry wells, and three OWS are present at the Site. In addition, ten interior floor drains are identified, four in the mechanical room, and two in the kitchen area of the administration building, and four in the AMSA shop. The sump is located in the administration building boiler room. Two grease traps are also located in the kitchen area.

The administration building interior drains are reportedly tied into the city's sanitary sewer system, as are the grease traps. No interior drains are reported to go through an OWS.

All exterior drains, except two are reportedly tied to one of the three OWS. The two drains that do not connect to an OWS are located directly adjacent to the administration building; one at the bottom of a stairwell, and one associated with an exterior can wash where kitchen cans are cleaned.

The southern half of the Site is served by four exterior drains that flow to one of the OWS, and then to one of three drywells depending on how heavy stormwater runoff is. The three drywells have gravel bottoms and slotted sides for infiltration of stormwater runoff.

## **6.8 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 no ammunition is stored within the vault or on the grounds of the USAR Center.

## **6.9 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.

A secondary source report indicates a sensitive receptor near the Site. During the September 2006 Site visit, it was confirmed that the Hillyard Center, a Head Start Preschool and an Institute for Extended Learning, is located east across Market Street.

## **6.10 OIL/WATER SEPARATORS**

Three OWS are present at the Site. One is located near the southeast corner of the AMSA shop, and is associated with the vehicle wash area at that location. The OWS receives stormwater runoff from drains in the paved area between the AMSA shop and the administration building, as well as wastewater from the vehicle wash area. The OWS drains into the city sanitary sewer southwest of the Site off the fence line.

A second OWS is located south of the AMSA shop, on the western edge of the property. The OWS receives stormwater from exterior drains in the POV area and the MEP area. It drains west into the city sanitary sewer off the fence line. Oily liquid was observed in this OWS at the time of the September 2006 Site visit.

The third OWS is located at the southern end of the property in a gravel portion of the MEP area. This OWS is relatively new. Site personnel noted that the previous OWS at that location had collapsed about 1.5 years ago, and was subsequently rebuilt. No record of environmental sampling, testing or cleanup was available. Site personnel indicated that the work had been overseen by the U.S. Army Corps of Engineers, but no reports or documentation had been received. This OWS receives stormwater from drains in the southern parts of the POV and MEP areas. It is connected to three infiltration drywells located in the southern third of the Site, and does not join the city sanitary sewer.

Two grease traps are associated with the kitchen. Site personnel had no knowledge of the regularity or most recent servicing of the grease traps.

## **6.11 PCB EQUIPMENT**

Based upon information provided by the 70<sup>th</sup> 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.

### **6.12 PCB TRANSFORMERS**

Three pole-mounted transformers are located at the Site. All are operated and maintained by the Avista Utilities Company. Two are located at the northwest corner of the Site, while the third is located at the southeast corner of the facility fence. A sticker indicating that there were no PCBs was present on the transformers.

### **6.13 RADIOACTIVE 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.

However, because the Facility's mission had included medical activities, primarily training and performance of medical exams, there were exam rooms. Most have been converted to offices. However, there is a dental x-ray room in the basement, which is no longer used. Site personnel were unaware of any other radioactive materials or activities ever at the Site.

### **6.14 RADON**

The most recent available radon survey results are from a 2004 long-term radon sampling report, in which 12 samples from different parts of the USAR Center were taken. This report concluded that radon was present in all samples above detection limits, but all were below the USEPA's recommended maximum allowable exposure level of 4 pCi/l. Shaw Environmental Group is currently performing radon surveys at facilities within the 70th RRC. The radon surveys commenced in July 2006 and results are currently not available.

### **6.15 UNDERGROUND STORAGE TANKS**

No USTs are currently present on the Site. Historically, two heating oil USTs, one 1,000-gallon and one 3,000-gallon, were located at the USAR Center. Both of these tanks were removed in 1991 (Section 3.5.2). In addition, an approximately 300-gallon UST for waste oil, antifreeze, solvents, brake fluid, etc. was historically present at the Site. This UST was also removed in 1997 (Section 3.5.3).

## **6.16 WASH RACK**

A concrete vehicle wash pad is located adjacent to the AMSA shop on the southeast side. Wash water is directed to slotted drains by the slope of the pad. The drain flows to an OWS, which in turn flows southwest off the Site and connects to the city sanitary sewer.

## **6.17 WASTE DISPOSAL SITES AND ACTIVITIES**

Solid waste is managed on-site in two metal dumpsters. Waste Management of Spokane empties the dumpsters weekly. Non-hazardous waste management, such as waste oil, is managed by Defense Reutilization Marketing Office (DRMO). There were no signs of land-filling or illegal waste disposal activities at the Site during the September 2006 site visit.

## **7.0 REVIEW OF SPECIAL RESOURCES**

### **7.1 LAND USE**

Figure 11 in Appendix A provides a 1991 aerial photograph of the USAR Center and surrounding area and depicts current land use, which is commercial and residential. The Site is zoned CC2 Commercial/Corridor-Commercial/Residential.

### **7.2 COASTAL ZONE MANAGEMENT**

According to the Department of Energy Environmental Policy & Guidance website for Coastal Zone Management Act and related regulations, Spokane County Washington does not lie within a coastal zone management area ([www.eh.doe.gov/oepa/laws/czma.html](http://www.eh.doe.gov/oepa/laws/czma.html)).

### **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 (Overview Map in Appendix E).

### **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 (Overview Map in Appendix E).

### **7.5 NATURAL RESOURCES**

No Site-specific survey addressing natural resources was available for review. Based on discussions with the Environmental Program Manger under contract with the 70<sup>th</sup> RRC, there are no issues of environmental concern related to natural resources at the Site.

### **7.6 CULTURAL RESOURCES**

Based on discussions with the Environmental Program Manger under contract with the 70<sup>th</sup> RRC, there is neither sites of cultural or traditional religious significance nor historic properties identified at the Site. Furthermore, the Site is not identified in the National Register of Historic Places Information System database, though no cultural resource survey has been performed. However, because the buildings are in excess of 50 years old, they may be potentially eligible for the National Register of Historic Places, and have not been evaluated for eligibility.

## 8.0 CONCLUSIONS

Lawhon & Associates, Inc. in conjunction with FMSM was contracted to prepare an ECP report for the Pfc. Joe E. Mann U.S. Army Reserve Center (WA032) located at 4415 North Market Street, Spokane County, Spokane, Washington. The tract of land is irregularly shaped with the east and west boundaries tapering to a point at the southern end of the property and encompasses approximately 7 acres. The Site consists of two permanent buildings: an administration building and an AMSA shop.

The USAR Center is currently occupied by the 981<sup>st</sup> Medical Detachment, the 396<sup>th</sup> Medical Detachment (Storage), the 643<sup>rd</sup> (Training), the 22<sup>nd</sup> Legal Defense Organization Trial Defense Services, and AMSA #80. The Site has been a USAR Center since the administration building and AMSA shop were constructed in 1953. An addition was added on the administration building in 1974 and the AMSA shop has undergone a number of renovations, with the most recent being an addition in 2001.

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** - One 250-gallon, double-walled concrete used oil AST is present near the southwest corner of the AMSA shop. Site personnel indicated that one or more ASTs had been present in the past, but the exact location(s) was unknown. The tank itself shows staining; however, no stains or evidence of spills or release on the ground around the tank were observed during the September 2006 Site visit.
- **Asbestos Containing Materials** – ACM was identified only in the administration building in a 2003 “Good Faith” Asbestos Survey. The report from that survey identified ACM in various floor tiles and mastic, glue on ceiling tiles, and vibration dampers in the ventilation system. Asbestos in the vibration dampers was considered as friable in the report. The 2003 survey found no asbestos in the AMSA shop. During the September 2006 Site visit, facility personnel indicated that there had been a recent water pipe break in the administration building boiler room. The insulation in the area of the break had been damaged. In addition, areas of loose or missing floor tiles were observed in the vent/air conditioning room in the administration building.
- **Use & Storage of CERCLA Hazardous Substances** – Chemicals containing CERCLA hazardous substances would have been used and stored at the Site in

amounts necessary to support unit-level vehicle and building maintenance activities. The quantities stored would reportedly not have exceeded corresponding CERCLA threshold planning quantities. There is no documentation indicating that the chemicals used or stored were improperly handled, released, or disposed at the Site.

- **Hydraulic Equipment/Grease Rack** - Hydraulic equipment, such as a hydraulic lift/grease rack, that may incorporate oil reservoirs, is currently not present at the USAR Center. According to Site personnel and a 1989 Army property report (Section 3.5.1), a hydraulic lift/grease rack was historically located in the AMSA shop, which is no longer present. Site personnel were uncertain when it was removed. The 1989 report states that it was present then, but had not been used in many years.
- **Indoor Firing Range** - Historically, the Site operated an indoor firing range in the basement of the administration building. In March – April 2001 a range removal and abatement was performed. A letter dated April 20, 2001 to the Mann Hall USAR Center stated that lead clearance levels were attained. The area was remodeled and is currently used for study/training with multiple computer workstations.
- **Lead-Based Paint** - A LBP survey was performed at the USAR Center and AMSA shop in 2003. According to the report, LBP is present in both facilities in varying amounts. The highest amounts are in red primers used on metal railings in the stairwells, and orange primers used in doorframes in the administration building. High concentrations of lead were also present on the roll-up doors in the AMSA shop. During the 2006 Site visit, painted surfaces within the administration building and AMSA shop appeared to be in fair to good condition.
- **Munitions and Explosives of Concern** - 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 no ammunition is stored within the vault or on the grounds of the USAR Center.
- **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.

The EDR report indicates a sensitive receptor near the Site. During the September 2006 Site visit, it was confirmed that the Hillyard Center, a Head Start

Preschool and an Institute for Extended Learning, is located east across Market Street.

- **Oil/Water Separators** - Three OWS are present at the Site. One is located near the southeast corner of the AMSA shop, and is associated with the vehicle wash area at that location. The OWS receives stormwater runoff from drains in the paved area between the AMSA shop and the administration building, as well as wastewater from the vehicle wash area. The OWS drains into the city sanitary sewer southwest of the Site off the fence line.

A second OWS is located south of the AMSA shop, on the western edge of the property. The OWS receives stormwater from exterior drains in the POV area and the MEP area. It drains west into the city sanitary sewer off the fence line. Oily liquid was observed in this OWS at the time of the September 2006 Site visit.

The third OWS is located at the southern end of the property in a gravel portion of the MEP area. This OWS is relatively new. Site personnel noted that the previous OWS at that location had collapsed about 1.5 years ago, and was subsequently rebuilt. This OWS receives stormwater from drains in the southern parts of the POV and MEP areas. It is connected to three infiltration drywells located in the southern third of the Site, and does not join the city sanitary sewer.

- **Petroleum Product Storage** - Petroleum storage occurs and historically would have occurred in designated areas within the AMSA shop and three hazmat storage sheds, located on the western edge of the Site. Petroleum products as well as antifreeze currently in use in the ASMA shop are kept in an oil distribution room in 55-gallon drums. These products are dispensed through a piped system connected to an electric air compressor also located in the AMSA shop.

Information provided by the WDOE shows that there was a 250-gallon release of unleaded fuel in July 1992 due to an auto/truck incident. The specific location on the Site was not identified; however, the report does state that the spill occurred on an asphalt area. WDOE reported fuel had penetrated the asphalt to the soils below. No additional information was available from WDOE.

- **Pits, Ponds, Sumps, Drywells, and Catch Basins** - A 2004 Survey of Drains, Pollution Control Equipment, and Discharge Points identified twelve exterior surface drains, one sump, three dry wells, and three OWS at the Site. In addition, ten interior floor drains are identified, four in the mechanical room, and two in the kitchen area of the administration building, and four in the AMSA shop. Two grease traps are also located in the kitchen area.

- **PCB Equipment** - Based upon information provided by the 70<sup>th</sup> 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.
- **PCB Transformers** - Three pole-mounted transformers are located at the Site. All are operated and maintained by the Avista Utilities Company. Two are located at the northwest corner of the Site, while the third is located at the southeast corner of the facility fence. A sticker indicating that there were no PCBs was present on the transformers.
- **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.

Historically, part of the USAR Center's mission included medical activities, primarily training and performance of medical exams. As a result, there is a dental x-ray room in the basement of the administration building that is no longer in use. According to Site personnel all dental equipment is still located in this room, and may contain an x-ray unit, which could contain minor amounts of radioactive material.

- **Radon** – The most recent available radon survey results are from a 2004 long-term radon sampling report, in which 12 samples from different parts of the USAR Center were taken. This report concluded that radon was present in all samples above detection limits, but all were below the USEPA's recommended maximum allowable exposure level of 4 pCi/l. Shaw Environmental Group is currently performing radon surveys at facilities within the 70th RRC. The radon surveys commenced in July 2006 and results are currently not available.
- **Underground Storage Tanks** - No USTs are currently present on the Site. Historically, two heating oil USTs, one 1,000-gallon and one 3,000-gallon, were located at the USAR Center. Both of these tanks were removed in 1991. One of the tank cavities exhibited contaminated soils, which were removed at the time of the tank removals, which placed it on the State LUST list. The status of the Site is listed as "reported cleaned up", dated 7/1992. In addition, an approximately 300-gallon UST for waste oil, antifreeze, solvents, brake fluid, etc. was

historically present at the Site. This UST was removed in 1997. Soil samples taken at the time of excavation showed levels below the Washington Model Toxics Control Act cleanup levels.

The 1,000-gallon heating oil tank was located at the southeast corner of the AMSA shop very near the vehicle wash area. The location of the 3,000-gallon heating oil tank is unknown, except that it was below concrete. The approximately 300-gallon waste product tank was located near the northeast corner of the AMSA shop, which is now lawn.

- **Wash Water Discharge** - A concrete vehicle wash pad is located adjacent to the AMSA shop on the southeast side. Wash water is directed to slotted drains by the slope of the pad. The drain flows to an OWS, which in turn flows southwest off the Site and connects to the city sanitary 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 soils encountered during UST removal and the 250-gallon fuel spill.

## 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

- Ms. Charlene Mitzimberg, Unit Administrator, Joe E. Mann USAR Center, (509) 483-6920, September 6, 2006.
- Mr. Steve Hart, Facility Manager, Joe E. Mann USAR Center, (509) 483-6920, ext. 123, September 6, 2006.
- Mr. Patrick Marchman, Environmental Program Manger, ICI, LLC, U.S. Army Reserves 70<sup>th</sup> Regional Readiness Command, (206) 301-2091, September 6-7, 2006.

### 10.2 RESOURCES CONSULTED

- Environmental Data Resources, Inc. (EDR) Report for the Pfc. Joe E. Mann 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
  - Confirmed and Suspected Contaminated Sites List, May 11, 2006
  - Hazardous Sites List, March 27, 2006
  - Confirmed & Contaminated Sites – No Further Action, May 11, 2006
  - Solid Waste Facility Database, October 01, 2004

- Solid Waste Tire Facilities, November 01, 2005
- Leaking Underground Storage Tanks Site List, March 08, 2006
- Underground Storage Tank Database, April 27, 2006
- Aboveground Storage Tank Locations, December 12, 2005
- Hazardous Waste Manifest Data, December 31, 2004
- Reported Spills, March 29, 2006
- Institutional Control Site List, June 06, 2006
- Voluntary Cleanup Program Sites, May 11, 2006
- Independent Cleanup Reports, December 01, 2002
- Drycleaner List, January 12, 2006
- Clandestine Drug Lab Contaminated Site List, May 23, 2006
- Washington Emissions Data System, December 31, 2004
- Inactive Drycleaners, January 01, 2006
- Tribal Records
  - Indian Reservations, December 31, 2004
  - Leaking Underground Storage Tanks on Indian Land, April 14, 2006
  - Underground Storage Tanks on Indian Land, April 05, 2006
- EDR Proprietary Records
  - Manufactured Gas Plants
  - Historical Auto Stations
  - Historical Cleaners
- Historical Chain of Title Report for the PFC Joe E. Mann USARC, September 14, 2006.

- Environmental Lien Search Report for the PFC Joe E. Mann USARC, September 14, 2006.
- State of Washington Department of Ecology, Coastal Zone Management Program, September, 2006,  
<http://www.ecy.wa.gov/programs/sea/czm/index.html>.
- State of Washington State Department of Natural Resources Geology of Washington, Columbia Basin Area website, September, 2006,  
<http://www.dnr.wa.gov/geology/columbia.htm>.
- USEPA Map of Radon Zones,  
<http://www.epa.gov/radon/zonemap/washington.htm>.

### **10.3 AGENCIES CONTACTED**

- Ms. Sally Perkins, Washington Department of Ecology, 3190 160<sup>th</sup> Avenue SE, Bellevue, WA, August 10, 2006.
- US EPA, Region 10 FOIA Officer, 1200 6<sup>th</sup> Avenue, Seattle, WA, August 10, 2006.
- Planning Department, City of Spokane Valley Planning Department, (509) 921-1000, September 28, 2006.