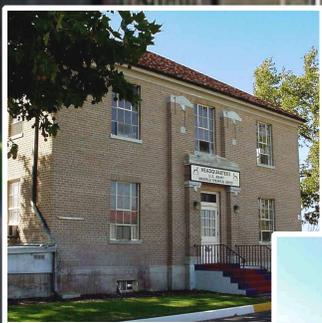


Final Integrated Cultural Resources Management Plan Umatilla Chemical Depot Hermiston, Oregon

U.S. ARMY
UMATILLA CHEMICAL DEPOT



January 2002

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**FINAL
INTEGRATED
CULTURAL RESOURCES MANAGEMENT PLAN
FOR
UMATILLA CHEMICAL DEPOT
HERMISTON, OREGON**

**Prepared by:
Earth Tech, Inc.
Colton, California**

**Contract No. GS-10F-0209K
Delivery Order 0146**

**Contracting Office:
AMC Installations and Services Activity
Rock Island Arsenal, Illinois**

January 2002

EXECUTIVE SUMMARY

This Integrated Cultural Resources Management Plan (ICRMP) outlines U.S. Department of the Army (DA) policies, procedures, and responsibilities for meeting cultural resources compliance and management requirements at Umatilla Chemical Depot (UMCD). This document has been prepared in accordance with Army Regulation 200-4 and DA Pamphlet 200-4. The policies described herein are designed to ensure that UMCD makes informed decisions regarding the cultural resources under its control. These decisions should comply with public laws, support the military mission, and be consistent with sound principles of cultural resources management.

This ICRMP is a 5-year plan and encompasses 2002-2006. It is designed to be a component of the installation Master Plan, to complement other UMCD plans (e.g., the Integrated Natural Resources Management Plan) and to serve as the Installation Commander's decision document for the conduct of cultural resources management actions. This ICRMP is intended for use by any personnel at UMCD involved in planning activities; however, the individual responsible for the management of cultural resources on a day-to-day basis is the Cultural Resources Manager (CRM).

CULTURAL RESOURCES INVENTORY—SUMMARY/STATUS

Prehistoric and Historic Archaeological Resources

UMCD encompasses 17,054 acres of land; a 12.2-percent archaeological sample survey of the facility was completed in 1995 (Borenson 1996). Additionally, other small surveys have been done in conjunction with previous construction projects. At the present time, however, there are no plans for any further archaeological surveys. An insignificant scatter of prehistoric flake tools near Coyote Coulee, as well as shell and lithic remains, have been reported in the sand dunes in the northeastern portion of the base. Otherwise, there are three recorded archaeological sites at UMCD: a pre-World War II dump site and two wagon train trails that may be spurs of the historic Oregon Trail. There is a study currently underway by the Oregon Bureau of Land Management to study the wagon trails.

Historic Buildings and Structures

A historic buildings and structures study conducted by Department of the Army Development and Readiness Command (DARCOM) in 1984 concluded that Buildings Nos. 1 and 2 were eligible for listing in the National Register of Historic Places (National Register) as being of local architectural significance. Since the DARCOM study, there have been no additional inventories conducted. In 1988, the Oregon State Historic Preservation Officer (SHPO) found that the Depot itself met Criterion A for its association with national defense efforts and Criterion C for architectural merit, and is now considered eligible for listing in the National Register as a Historic District. Currently, the Oregon SHPO is considering the eligibility of the remaining World War II-era buildings.

In 2000, the U.S. Army Corps of Engineers, Fort Worth District, completed a national historic context for World War II-era army ammunition storage magazines (Geo-Marine 2000, *Army Ammunition and Explosives Storage in the United States, 1775-1945*). The objective of the document was to present the themes and events that influenced the construction, modification and use of ammunition storage magazines during World War II and during the mobilization effort prior to this war. In addition to context the document also presents a classification system for all ammunition storage magazines and a discussion of National Register eligibility requirements. The study recommends that those installations with the most comprehensive array of the various magazine designs **may** be eligible for inclusion in the National Register.

While UMCD was not considered to be eligible for listing in the National Register, it should be noted that the report indicated that in rare instances an installation may have had such an exceptional impact on a state or locality that it could be eligible for inclusion in the National Register under other state or local themes.

Traditional Cultural Properties/Sacred Sites

Although UMCD is situated on land that was once part of the Umatilla Indian Reservation, no Traditional Cultural Properties (TCPs) eligible or potentially eligible for listing in the National Register have ever been identified. There are no Native American Graves Protection and Repatriation Act (NAGPRA) comprehensive agreements (CAs) in place. No known sacred sites are located on the Depot.

Paleontological Resources

Although the geology of the UCMD region (the floodplain of the Columbia River) represents the potential for paleontological remains, there have been no systematic paleontological investigations conducted at the depot. A “large bone” was unearthed during a construction project in 1941 and subsequently turned over to an unknown natural history society; however, there have been no other paleontological finds at UMCD.

UMATILLA CHEMICAL DEPOT CULTURAL RESOURCES GOALS

Based on the cultural resources inventory previously described, the following general and specific goals have been proposed for UMCD over the next 5 years. These are not necessarily in order of preference. Some of the goals may already be being met, and some may be in the beginning stages but may need additional funding and time to complete.

General Goals

- Ensure compliance with federal preservation laws
- Locate, evaluate, and protect archaeological, historical, and sacred sites
- Contribute to the regional archaeological and historical body of knowledge
- Employ efficient techniques for the management of cultural resources.

Specific Goals

- Provide training for CRM and Base Commander on the NAGPRA and Section 106 of the National Historic Preservation Act (NHPA)

- Provide cultural resources management training to Security Police; develop an installation directive regarding procedures for unexpected cultural resources finds
- Prepare an implementing environmental assessment for the ICRMP
- Complete the Columbia Shrub Step Delineation study to assist with the identification of Native American plant resources
- Develop an installation instruction for National Environmental Policy Act actions to help protect cultural resources
- Develop a single, coordinated TCP and Sacred Sites Survey
- Develop a CA with the Confederated Tribes of the Umatilla Indian Reservation relative to mutually acceptable methods for the treatment of affiliated cultural materials and sites
- Conduct an inventory and evaluation of UMCD archaeological resources
- Conduct a historic buildings and structures inventory that completes the World War II evaluation of UMCD, and complete the Cold Ware-era inventory funded in fiscal year 2000.
- Consult with the Oregon SHPO to achieve concurrence on the status of archaeological and architectural properties at UMCD
- Enter into a Programmatic Agreement with the Oregon SHPO as to which buildings and areas at UMCD are determined to be “not eligible,” and therefore do not require consultation with the SHPO relative to future activities and undertakings.

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ACRONYMS/ABBREVIATIONS

A.D.	Anno Domini
ADA	Americans with Disabilities Act
AEC	Army Environmental Center
AHPA	Archaeological and Historic Preservation Act
AIRFA	American Indian Religious Freedom Act
APE	area of potential effect
AR	Army Regulation
ARPA	Archaeological Resources Protection Act
B.C.	Before Christ
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
B.P.	before present
BRAC	Base Realignment and Closure
CA	Comprehensive Agreement
CEA	Civilian Executive Assistant
CERL	Construction Engineering Research Laboratory
CFR	Code of Federal Regulations
CIS	Capital Investment Strategy
cm	centimeter
Council	Advisory Council on Historic Preservation
CRM	Cultural Resources Manager
CSDP	Chemical Stockpile Disposal Program
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
°	degree
DA	Department of the Army
DARCOM	Development and Readiness Command
DEH	Directorate of Engineering and Housing
DHAS	DARCOM Historical/Archaeological Survey
DOD	Department of Defense
DPW	Department of Public Works
EA	environmental assessment
EBS	environmental baseline survey
EIS	environmental impact statement
EO	Executive Order
EPR	Environmental Program Requirements
F	Fahrenheit
FOIA	Freedom of Information Act

ACRONYMS/ABBREVIATIONS (continued)

FPO	Federal Preservation Officer
FR	Federal Regulation
FS	field specimen
ft ³	cubic feet
FY	fiscal year
GIS	Geographic Information System
GPS	Global Positioning System
GSA	General Services Administration
Guard	U.S. Army National Guard
HABS/HAER	Historic American Buildings Survey/Historic American Engineering Record
HPP	Historic Preservation Plan
HQDA	Headquarters Department of the Army
HWAD	Hawthorne Army Depot
ICRMP	Integrated Cultural Resources Management Plan
INRMP	Integrated Natural Resources Management Plan
IRM	Industrial Risk Manager
IS	Installation Support
ISA	Interservice Support Agreements
JA	Judge Advocate
JOR	Job Order Request
Keeper	Keeper of the Record
LAAAP	Louisiana Army Ammunition Plant
LEA	Layaway Economic Analysis
MACOM	Major Command
MCA	Military Construction, U.S. Army
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MSL	mean sea level
NAGPRA	Native American Graves Protection and Repatriation Act
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NPS	National Park Service
ODFW	Oregon Department of Fish and Wildlife

ACRONYMS/ABBREVIATIONS (continued)

OU	Operable Unit
PA	Programmatic Agreement
PAM	pamphlet
PAO	Public Affairs Office
PLS	Property Listing Summary
PMCSO	Program Management Office for Chemical Stockpile Demilitarization
POC	point of contact
POW	prisoner of war
RI/FS	Remedial Investigation/Feasibility Study
RPMP	Real Property Master Plan
SAIC	Science Applications International Corporation
SBCCOM	Soldier and Biological Chemical Command
SCS	Soil Conservation Service
SHPO	State Historic Preservation Officer
SOP	Standard Operating Procedure
TCP	Traditional Cultural Property
TEAD	Tooele Army Depot
THPO	Tribal Historic Preservation Officer
TJAG	The Judge Advocate General
TM	Technical Manual
UMCD	Umatilla Chemical Depot
UMCDIF	Umatilla Chemical Depot Isolate Form
UMDA	Umatilla Depot Activity
USACE	U.S. Army Corps of Engineers
U.S.C.	U.S. Code
USGS	U.S. Geological Survey
WDC	Washington Demilitarization Company

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1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

This Integrated Cultural Resources Management Plan (ICRMP) outlines U.S. Army policies, procedures, and responsibilities for meeting cultural resources compliance and management requirements at the Umatilla Chemical Depot (UMCD), Hermiston, Oregon. The document has been prepared in accordance with Army Regulation (AR) 200-4 (Appendix A), which encompasses the requirements described in Sections 2.1 through 2.4 of this document, and Department of the Army (DA) Pamphlet 200-4, which provides guidance for implementing the policies described in AR 200-4. The policies described herein are designed to ensure that UMCD makes informed decisions regarding the cultural resources under its control, complies with public laws, supports the military mission, and is consistent with sound principles of cultural resources management.

This ICRMP is a 5-year plan designed to be a component of the installation Master Plan, to complement other UMCD plans (e.g., the Integrated Natural Resources Management Plan [INRMP]), and to serve as the Installation Commander's decision document for the conduct of cultural resources management actions. The UMCD ICRMP is an internal Army compliance and management plan designed to integrate the entirety of the installation's cultural resources program with ongoing mission activities, allow for ready identification of potential conflicts between the installation's mission and the cultural resources management program, and identify compliance actions necessary to maintain the availability of mission-essential properties and acreage.

The scope of this plan includes regulations and guidance that are beyond the statutory authority of the Oregon State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation (Council), and any affected Native American groups. Because of this, the plan is not intended to be the subject of, implemented by reference to, or included in National Historic Preservation Act (NHPA) Programmatic Agreements (PAs), Memoranda of Agreement (MOAs), or Native American Graves Protection and Repatriation Act (NAGPRA) Comprehensive

Agreements (CAs). However, the sections of the UMCD ICRMP that pertain to the NHPA or the NAGPRA compliance can be extracted from the document, and those actions can be integrated by reference into a PA, MOA, or CA. Requests for review of the UMCD ICRMP by entities other than Army organizations may be useful for the gathering of external expertise; however, review comments will be considered nonbinding.

Until such time as this document has been formally accepted, all UMCD activities with the potential to affect cultural resources will continue to be reviewed on a case-by-case basis, under Section 106 of the NHPA. Discussions of the Section 106 review process, both internal and external, are provided in Chapter 5.0 and Appendix B.

Upon acceptance, this document supercedes the Integrated Cultural Resources Management Plan, 2000-2004 (Tetra Tech 2000) and all other UMCD-specific cultural resources guidance documents, any appropriate and applicable portions of which have been incorporated herein.

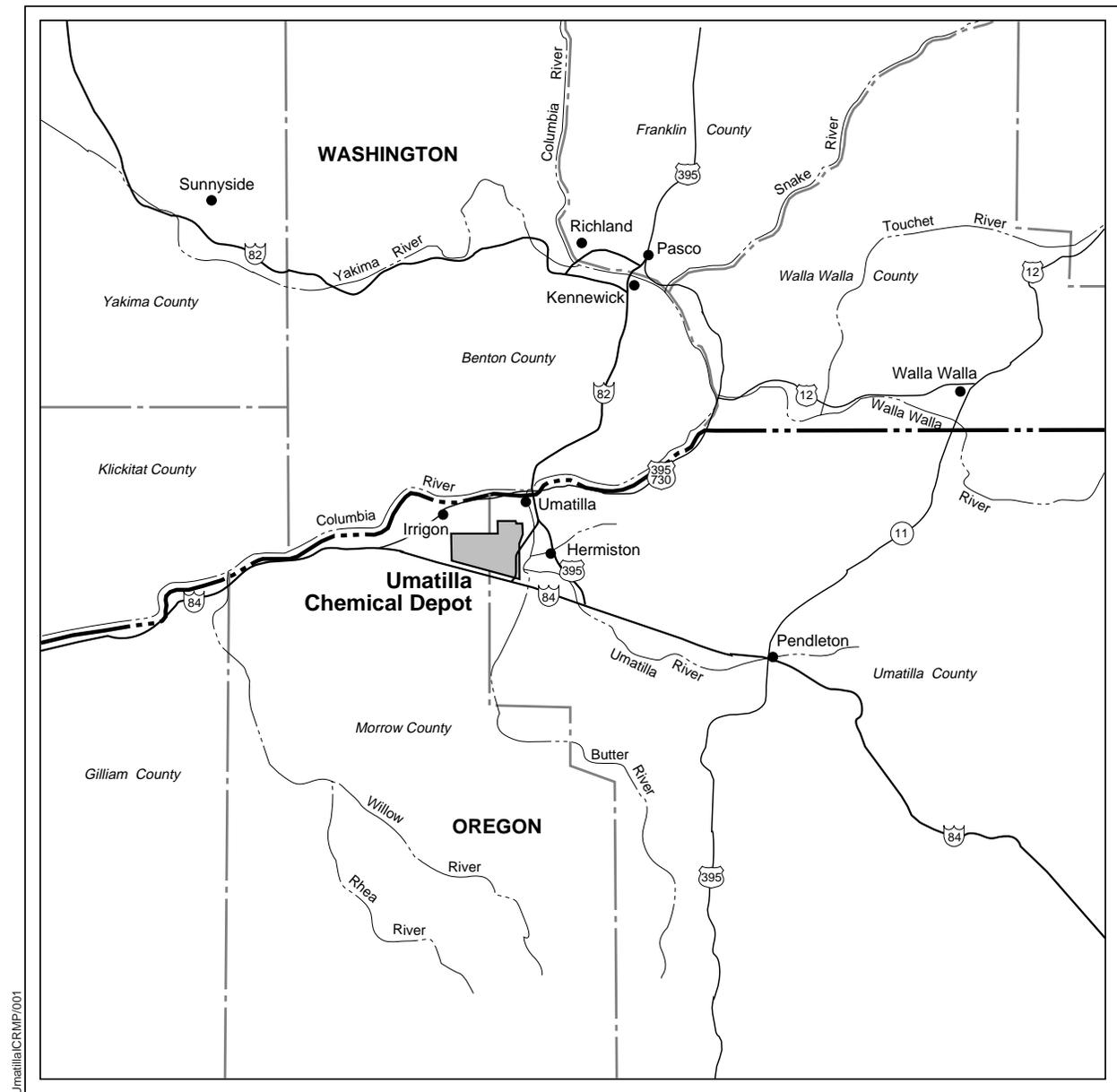
1.2 INSTALLATION DESCRIPTION

1.2.1 General Setting

UMCD is situated in portions of Umatilla and Morrow Counties in northeastern Oregon and covers 17,054 acres (Figure 1-1). The Depot has a buffer area on 2,674 acres of private property and Bureau of Land Management (BLM) lands north and east of the Depot boundaries (Figure 1-2). Geographically, UMCD is positioned at the intersection of Interstates 82 and 84, approximately 35 miles south of the Tri-Cities area of Washington State, in a region of gently rolling hills sloping northwest to the Columbia River, where elevations range from 400 to 677 feet above mean sea level (MSL) (Earth Tech 1995). It is surrounded on all sides by farmlands irrigated by pivoting-head sprinkler systems.

1.2.2 Brief History

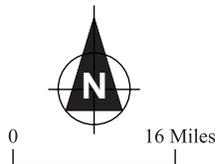
The land currently occupied by UMCD was historically inhabited by the Sahaptin-speaking Umatilla Indians, and while there was some initial contact between the Umatilla Indians and Euroamericans in the latter part of the eighteenth century, actual settlement of the area by Euroamericans did not begin in earnest until the middle of the nineteenth century, when mining



UmatillaICRMP/001

Figure 1-1

- State Highway
- U.S. Highway
- Interstate Highway
- State Boundary
- County Boundary



Umatilla Chemical Depot
Vicinity Map

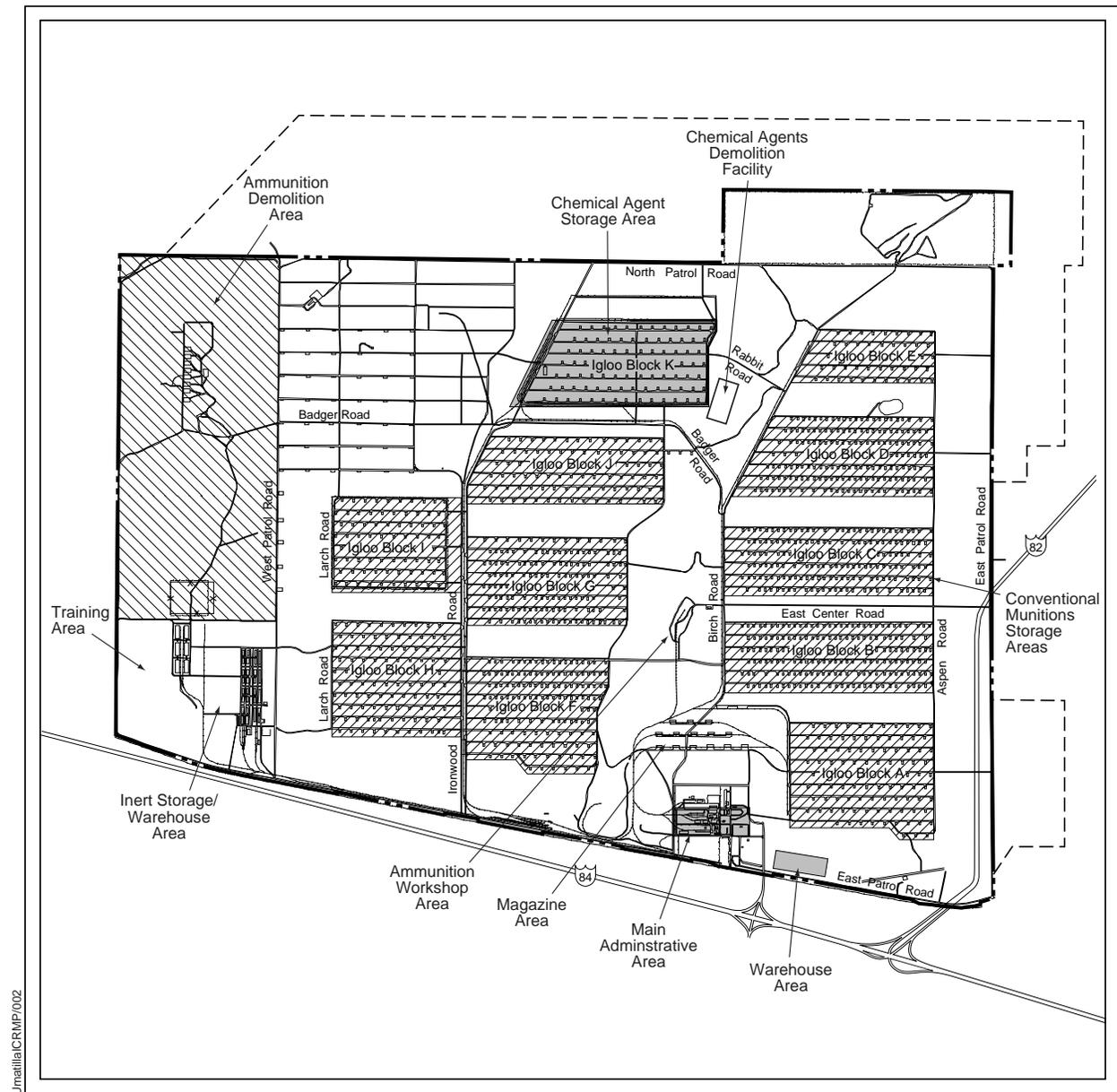


Figure 1-2

- Depot Boundary
- - - Restricted Easement Boundary
- Interstate Highway



Source: U.S. Army. 1995. *Disposal of Chemical Agents and Munitions Stored at Umatilla Depot Activity, Hermiston, Oregon*. Prepared for U.S. Army Chemical Demilitarization and Remediation Activity, Aberdeen Proving Ground.

Functional Areas of the Umatilla Chemical Depot

and grazing opportunities developed. In 1855, regional Cayuse, Umatilla, and Walla Walla tribes were relocated onto the Umatilla Indian Reservation. Portions of present-day UMCD were once a part of that reservation.

On October 14, 1941, War Department General Order No. 11 designated a 16,000-acre tract of land as a Military Reservation; thereafter, on March 20, 1942, the U.S. Government took exclusive jurisdiction of the land and established an Army Ordnance depot to store chemical-filled munitions and containerized agents and to repackage and store conventional munitions. Ammunition demolition operations began at the Depot in 1945, and an additional 3,939 acres was acquired for safety zones during a period from 1957 through 1959 through easement and withdrawals from public and private lands (Intermountain Range Consultants 1988).

In 1962, the old Umatilla Ordnance Depot was assigned to the U.S. Army Supply and Maintenance Command (Horne Engineering Services 1997). It was renamed the Umatilla Army Depot, and storage of chemical agents and munitions was conducted on the premises. Thereafter, in August 1973, the facility was designated as an “activity” of the Tooele Army Depot (TEAD) and was renamed the Umatilla Depot Activity (UMDA).

By 1988, the Depot was recommended for realignment in accordance with Base Realignment and Closure (BRAC) provisions. Most conventional ordnance was either moved to Hawthorne Army Depot (HWAD) or destroyed. In October of 1995, the Depot was placed under the Major Soldier Biological and Chemical Command (SBCCOM), and was once again redesignated, this time as the Umatilla Chemical Depot.

Additional discussion of the major historical events associated with the installation's landscape and environmental setting, and a brief description of UMCD tenants and their activities, can be found in Chapter 3.0.

1.2.3 Umatilla Chemical Depot Functional Units

Figure 1-2 shows the locations of significant areas of the Depot. Currently, there are four functional units at UMCD, each of which supports a different function in relationship to UMCD missions. The functional units are:

- **Ammunition Demolition Area.** There is a 1,750-acre demolition area in the northwestern portion of UMCD that is used for demilitarizing conventional munitions and burning defective or expired propellants. Currently, only authorized personnel are permitted to enter the ammunition demolition area. This area, which is fenced off from the rest of UMCD, is designated as Operational Unit (OU) 4 and is being remediated under the BRAC Cleanup Plan (Earth Tech 1995). This area has not been ground-checked for cultural resources.
- **Training Area.** The U.S. Army National Guard (Guard) uses 2 parcels of land on UMCD covering approximately 1,380 acres. The Guard uses this land for tank training and as a rifle range. The tank training range can accommodate nine tanks; however, only five tanks usually train on this area. Training consists primarily of tank maneuvering and firing lasers at plastic targets. Sometimes the target is placed on a moving vehicle. This area has not been ground-checked for cultural resources.
- **Administration Area.** The cantonment portion of UMCD covers approximately 191 acres and includes the administrative, facilities maintenance, and housing areas. This main administrative area presents itself very much as one would expect of an Army installation, which is to say it is a campus configuration of buildings set on the grassland prairies of East Oregon. Its entrance is marked by brick piers (Appendix C, Photo 1) and directs the visitor toward the Guard House (Appendix C, Photo 2). From there, Cedar Street acts as a strong visual and organizational axis, drawing the visitor farther into the area. To the right, a parade grounds is set off axis with the main street, while directly left, the Headquarters Building (Building No. 1) further reinforces that axis. Radiating off the Cedar Street axis, cross streets serve a host of maintenance and storage buildings, primarily situated to the west (behind the Headquarters Building). This entire area is strongly unified by a pallet of building materials common to many of the buildings. Tan brick and red tile roofs tend to offer visual identity to the administrative area as a special section of the Depot (Appendix C, Photos 3 and 4). Buildings in this area are listed in a real property inventory, with build dates, square footages, and building inventories on file

at the Depot. Additional descriptions are available in the Historical Properties Report (Building Technology Incorporated 1984) and the Library of Congress Historic American Engineering Record (HAER).

- **Storage Areas.** UMCD contains 1,001 ammunition storage igloos. Conventional munitions have been removed from the Depot; consequently, there are presently 900 empty igloos. The remainder are used for storing chemical agents (K Block), binary storage (chemical rounds), and security munitions (lower section of D Block). These highly disturbed areas have not been ground-checked for cultural resources, although there are three recorded historic sites just outside of these areas.

Finally, the relationship of the Chemical Agent Demolition Facility to UMCD functional units should be discussed. Although the facility is not yet operational, once it goes on line, it will have the effect of creating yet another functional unit within the Depot boundaries. The mission of the Chemical Agent Demolition facility will be to destroy those stockpiles of Nerve (VX and GB) and Blister (HD and mustard) agents that are either containerized or made a component part of certain rockets, bombs, and projectiles stored at UMCD. This mission is being carried out by congressional mandates and treaty compliance provisions, and once the incinerator facility is operating, the completion of the mission will serve to alter the Depot's overall mission relative to the storage and maintenance of chemical weapons.

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2.0 LEGISLATIVE AND REGULATORY REQUIREMENTS

This chapter summarizes the federal statutes, regulations, Executive Orders (EOs), and memoranda applicable to the management of historic properties and the operation of UMCD's cultural resources program. This chapter is organized as follows: Section 2.1 summarizes each of the federal laws that pertain to cultural resources. Section 2.2 outlines the implementing regulations and guidelines. Section 2.3 summarizes EOs and Presidential Memoranda. U.S. Army regulations, protocols, and guidelines are presented in Section 2.4, and guidance specific to UMCD is described in Sections 2.5 and 2.6. Additional discussions of legislation are contained within the various sections of the document where procedures for complying with legislative acts and regulations are discussed.

Federal legislation and regulations apply to the management of cultural resources on federal reservations, including military installations like UMCD. Federal and Army regulations also apply to tenants (i.e., other federal agencies, contractors, lessees) situated on real property under the Army's jurisdiction.

2.1 FEDERAL LEGISLATION

2.1.1 National Environmental Policy Act of 1969, as amended

The National Environmental Policy Act (NEPA) requires decision makers to consider the environmental effects of their proposed programs, projects, and actions prior to initiation. Impact assessments under NEPA must consider effects on all types of cultural resources as well as any effects on Native American groups, Native Hawaiian and Alaska Native organizations, or other ethnic and social communities to whom cultural resources may be important.

The NEPA is implemented by 40 Code of Federal Regulations (CFR) Parts 1500 through 1508.

2.1.2 National Historic Preservation Act, Public Law 89-665; 16 U.S. Code Sections 470-470W-6, as amended

The NHPA of 1966, as amended, is the primary federal statute that addresses the management of cultural resources. It establishes federal policy on historic preservation and provides the

framework by which the nation’s historic preservation program has been developed. Provisions of the NHPA most applicable to the Army’s historic preservation program include:

National Register of Historic Places. The National Register of Historic Places (National Register) is the nation’s inventory of historic places and the national repository of documentation on the variety of historic property types. The National Register process provides an avenue whereby historic properties of value on a national, state, or local level can be identified and nominated to the National Register.

State Historic Preservation Officers. The NHPA provides for an SHPO appointed by the governor to oversee a state’s historic preservation program and integrate it into the national program.

Advisory Council on Historic Preservation. The Council was created to review federal actions concerning historic properties and to advise the President and Congress on historic preservation issues.

Regulations, standards, and guidelines. This guidance is to be consulted by the Council and the Department of the Interior with respect to issues, regulations, standards, and guidelines related to provisions of the NHPA.

As defined under the NHPA (Section 301), a historic property refers to any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register, including artifacts, records, and material remains related to such a property or resource.

The primary responsibilities of federal agencies under the NHPA are contained in the following sections of the NHPA:

Section 106 requires federal agencies, prior to conducting activities classified as undertakings, to:

- Take into account the effects of undertakings on historic properties
- Allow the Council an opportunity to comment on undertakings that could affect historic properties.

The implementing regulation for Section 106 is 36 CFR Part 800. Section 106 guidance was revised by the Council and published in the Federal Register Federal Regulations (FR) (65FR239) on December 12, 2000. The new guidance became effective on January 11, 2001 (see Appendix B).

Section 110 affects all activities concerning historic properties under federal jurisdiction. It requires federal agencies to:

- Assume responsibility for, and undertake preservation of, historic properties under their jurisdiction
- Ensure that historic properties are adequately documented prior to engaging in alteration
- Designate a historic preservation officer for the agency
- Consider the preservation of historical and cultural values in the management of historic properties
- Exercise a high standard of care in the management of National Historic Landmarks (NHLs)
- Expend funds to carry out historic preservation responsibilities and, if appropriate, pass costs on to federal license and permit applicants
- Develop programs to identify, evaluate, and nominate historic properties to the National Register.

Section 110 Guidelines were published in the Federal Register on February 17, 1988 (53FR4727-46).

Section 111 addresses the lease or exchange of historic properties, including stipulations for agreements to manage those properties. Federal agencies are directed to:

- Establish and implement alternatives for historic properties not needed by the agency for current or projected uses. This includes adaptive re-use.
- Lease historic properties, as necessary, if the lease will adequately ensure the preservation of the historic property
- If desired, contract the management of historic properties following consultation with the Council to ensure adequate preservation of the properties.

2.1.3 Historic Sites Act of 1935

This Act establishes as national policy the preservation for public use of historic resources by giving the Secretary of the Interior (Secretary) the power to undertake historic surveys and to document, evaluate, acquire, and preserve archaeological and historic sites across the country. This act led to the eventual establishment within the National Park Service (NPS) of the Historic American Buildings Survey (HABS)/HAER division, as well as the NHL Program and the National Natural Landmarks Program.

2.1.4 Archaeological and Historic Preservation Act of 1974

The Archaeological and Historic Preservation Act (AHPA) of 1974 provides for survey, recovery, preservation, and protection of scientific, prehistoric, historic, or archaeological data that may be irreparably lost as a result of any federal construction project or federally licensed project, activity, or program. The AHPA has been interpreted as providing protection for paleontological resources, which are included within the category of scientific data.

2.1.5 Archaeological Resources Protection Act, Public Law 96-95; 16 U.S. Code 470aa-470mm, as amended

Provisions of the Archaeological Resources Protection Act (ARPA), applicable to federal or Native American lands, set forth additional requirements beyond those of the NHPA. These include:

- Establishing standards for permissible excavation, as validated through a permit process, and prohibiting unauthorized excavation by:

- Prescribing civil and criminal penalties for violations of the ARPA
- Requiring federal agencies to identify archaeological sites
- Encouraging cooperation between federal agencies and private individuals.

The ARPA defines archaeological resources as:

...any material remains of past human life or activities which are of archaeological interest, as determined under uniform regulations promulgated pursuant to this chapter. Such regulations containing such determinations shall include, but not be limited to: pottery, basketry, bottles, weapons, weapon projectiles, tools, structures or portions of structures, pit houses, rock paintings, rock carvings, intaglios, graves, human skeletal materials, or any portion or piece of any of the foregoing items. Nonfossilized and fossilized paleontological specimens, or any portion or piece thereof, shall not be considered archaeological resources, under the regulations under this paragraph, unless found in archaeological context. No item shall be treated as an archaeological resource under regulations under this paragraph unless such item is at least 100 years of age.

2.1.6 Native American Graves Protection and Repatriation Act, Public Law 101-601; 25 U.S. Code 3001-3013

The NAGPRA requires consultation with appropriate Native groups (e.g., Native Americans, Alaska Natives, Native Hawaiians) prior to excavation (either intentionally or through inadvertent discovery) of specified cultural items, comprising:

Human Remains

Associated funerary objects. Objects that, as part of the death rite or ceremony of culture, are reasonably believed to have been placed with individual human remains, where both the human remains and associated funerary objects are in the possession or under the control of a federal agency or museum.

Unassociated funerary objects. The same as associated funerary objects, except that the human remains are not in the possession or control of the federal agency or museum, and the objects can be identified by a preponderance of evidence.

Sacred objects. Specific ceremonial objects needed by traditional Native American religious leaders for the practice of traditional Native American religions by their present-day adherents.

Items of cultural patrimony. Objects having ongoing historical, traditional, or cultural importance central to the Native American group itself.

In addition to consultation, the NAGPRA specifically requires federal agencies to inventory and repatriate Native American cultural items in their possession.

2.1.7 American Indian Religious Freedom Act, Public Law 95-341; 42 U.S. Code, 1990

The American Indian Religious Freedom Act (AIRFA) establishes the rights of Native Americans to have access to sacred sites or sites of religious importance. The AIRFA defines a religious site as any place or area including, but not limited to, any geophysical or geographical area or feature:

- Sacred to Native American religion
- Where Native American practitioners are required by their religion to gather, harvest, or maintain natural substances or natural products for use during ceremonies, rituals, or for spiritual purposes and/or
- Utilized by Native American religious practitioners for ceremonies, rituals, or other spiritual practices.

A religious site may or may not contain physical remains, objects, or other elements that could identify it as an archaeological site. The AIRFA defines objects as specific items of use for religious practices that have spiritual or ritualistic importance. They may include sacred objects, nonsacred objects, and objects of cultural patrimony.

The AIRFA has no affirmative position on Native American consultation; however, the intent of the AIRFA (i.e., the identification of religious or sacred sites so that access can be allowed) can be met only through the consultation process.

2.1.8 Americans with Disabilities Act of 1990; 42 U.S. Code 12101

The Americans with Disabilities Act (ADA) of 1990 provides a national mandate prohibiting discrimination against disabled individuals. It defines a disabled individual as any individual having a physical or mental impairment that limits his or her life activities. Further, it establishes standards addressing discrimination toward disabled individuals and ensures that the federal government plays a central role in enforcing these standards. In addition to providing access to facilities, this legislation also addresses the accessibility of interpretive media, including the closed-captioning of all video and films and exhibits, as well as specially designed brochures for the visually impaired. This law is relative to cultural resources management because of its applicability to the preservation and protection of historic buildings and their character-defining features.

2.1.8.1 Section 504 of the Rehabilitation Act of 1973; 29 U.S. Code 70; and Implementing Regulations of the Department of Health, Education, and Welfare; 45 Code of Federal Regulations Parts 84, 85.

Federal agencies are required to publish regulations to ensure that federally assisted programs are accessible to all handicapped persons. In addition, pursuant to 36 CFR Part 800.4(c), modifications required by these regulations have no adverse effect on properties deemed eligible for or previously listed in the National Register. As a result, historic properties shall be equipped with programs accessible to and usable by handicapped persons.

2.1.8.2 Public Law 90-480.

This legislation established standards for physical access. Any newly constructed facilities must be designed to allow accessibility by visitors and/or staff with disabilities. Projects involving historic structures that require modification must be undertaken with the participation of a historic architect in compliance with other federal regulations, such as the NHPA. Alternative methods of accessibility must also be considered.

2.2 FEDERAL REGULATIONS AND GUIDELINES

2.2.1 Protection of Historic and Cultural Properties; 36 Code of Federal Regulations Part 800

The implementing guidance for Section 106 of the NHPA is provided in 36 CFR Part 800, *Protection of Historic Properties*. The regulation defines the process by which conflicts between historic preservation goals and proposed activities are identified and establishes the steps for resolution of conflicts through consultation. In addition to detailed procedures regarding the Section 106 process, the regulation provides identification of the various participants in the process, both consulting parties and interested persons (see Appendix B).

Revisions to 36 CFR Part 800 were published in the Federal Register on December 12, 2000. The intent of these revisions is to implement the 1999 amendments to the NHPA and to establish a procedure to meet the goals of streamlining the Section 106 regulatory process. In summary, these regulatory changes:

- Provide greater authority to a federal agency for the resolution of conflict directly with the SHPO, without Council involvement.
- Provide more focused Council involvement. The Council may enter the Section 106 process when an undertaking (1) has substantial impacts on important historic properties; (2) presents important questions of policy or interpretation; (3) has the potential to present procedural problems; or (4) presents issues of concern to Native American tribes or Native Hawaiian organizations.
- Redefine the roles of participants in the Section 106 process. The federal agency's primary responsibility for Section 106 decisions is emphasized, the advisory roles of the Council and the SHPO/Tribal Historic Preservation Officer (THPO) are clarified, and other participants' roles are more clearly defined, particularly Native American tribes, local governments, and applicants, who may participate as "consulting parties."
- Emphasize the importance of early initiation of Section 106.
- Encourage integration of the Section 106 review with reviews required under the NEPA and related laws.

- Authorize agencies to use the preparation of environmental impact statements (EISs) and environmental assessments (EAs) under the NEPA to meet Section 106 needs in lieu of following the specified Council process.
- Encourage federal agencies to develop alternate procedures for compliance with the NHPA.
- Simplify and clarify opportunities for public involvement in the Section 106 process.
- Allow more flexibility in designing the identification process.
- Remove “finding of effect” as a separate step, minimizing the number of consultation episodes required.
- Improve the process by which an adverse effect is determined, including changing the former “exceptions” to standard treatments.
- Eliminate the need for Council participation in several instances of consultation between the SHPO and the federal agency.
- Require Council comments to be considered by the head of the federal agency receiving them, as required by Section 110(1) of the NHPA.
- Allow anyone at any time to seek the Council’s opinion on agency findings and decisions under Section 106. There is no obligation to delay agency action while the Council conducts this review.
- Revise emergency and post-review discovery situations, placing greater emphasis on planning for unanticipated events and allowing for flexible responses.
- Shift the emphasis of Council review from individual cases to assessments of the overall quality of a federal agency’s or SHPO/THPO’s performance in the Section 106 process. Also, provisions are made for closer Council review of cases where a participant has been found to have shortcomings in complying with Section 106.

2.2.2 National Register of Historic Places, 36 Code of Federal Regulations Part 60

The process by which properties are added to, or removed from, the National Register is provided in 36 CFR Part 60, *National Register of Historic Places*. Of critical importance to the Army’s cultural resources program is Part 60.4, which provides the National Register criteria for

evaluation. These criteria state that the quality of significance is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

- (a) That are associated with **events** that have made a significant contribution to the broad patterns of our history; or
- (b) That are associated with the **lives of persons** significant in our past; or
- (c) **That embody the distinctive characteristics** of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) That have yielded, or may be likely to yield, information **important in prehistory or history**.

2.2.3 Procedures for State, Tribal, and Local Government Historic Preservation Programs: 36 Code of Federal Regulations Part 61

36 CFR Part 61 was published in Volume 64, Number 45 of the Federal Register on March 9, 1999 (Appendix D). Through this rule, the NPS revised requirements for state, tribal, and local historic preservation programs carrying out actions under the NHPA (as amended). Many of the revisions were intended to reduce the regulatory burden on, and provide more flexibility to, state, tribal, and local historic preservation programs in response to the President's Regulatory Reinvention Initiative and EO 12866. Other revisions were made in recognition of the changing and maturing professional nationwide practice of historic preservation. The most significant of the policy changes include:

- Ensuring a substantive and meaningful role for Native American tribes within the national historic preservation program. The full participation of tribes within this program is a national policy goal.
- Ensuring that, to the extent feasible, state and local governments identify, evaluate, and protect unique classes of historic properties (e.g., properties of religious and cultural importance to Native American tribes or Native Hawaiian organizations).

- Providing the general framework for state, local, and tribal historic preservation programs.

2.2.4 Section 110 Guidelines: Annotated Guidelines for Federal Agency Responsibilities under Section 110 of the National Historic Preservation Act

These guidelines were developed by the Secretary and the Council to assist federal agencies in establishing, monitoring, reviewing, and evaluating their programs for compliance with Section 110 of the NHPA. The overall purpose of the guidelines is to ensure the integration of historic preservation responsibilities into a federal agency's plans and programs. Step-by-step guidance is provided for implementation of each subsection of Section 110. Of greatest importance to this ICRMP are the following guidelines (followed by reference to the pertinent subsection):

- Examples of various effective uses of historic properties (a) (1)
- Considerations for the management of historic properties, including, but not limited to, level and area of significance, kinds of value, integrity, condition, costs to maintain, and existing use or potential reuse (a) (1)
- Establishment of a program to locate, inventory, and nominate all properties that appear to qualify for inclusion in the National Register (a) (2)
- Avoidance of damage to historic properties through deterioration, demolition, alteration, transfer, or related actions (a) (2)
- Appropriate documentation of historic properties subject to alteration or demolition, and proper distribution of that documentation (b)
- Designation of a federal preservation officer, including recommended qualifications (c)
- Recommendations for the procurement of funds to accomplish historic preservation activities (g).

2.2.5 Archaeology and Historic Preservation: Secretary of the Interior’s Standards and Guidelines (48FR44716-39, September 29, 1983)

These standards and guidelines (see Appendix E) provide technical advice for the accomplishment of archaeological and historic preservation activities and methods. They are not regulatory, nor are they meant to establish agency policy. Each section is organized into three parts: standards, guidelines, and technical sources. Information is published on the following topics:

Preservation Planning. This section describes the relationship between the key elements of preservation activities—identification, evaluation, registration, and treatment of historic properties. One of the most detailed discussions within this section is the development of historic contexts.

Identification. These standards and guidelines are designed to assist in the gathering of information on historic properties. Specific procedures are provided for the development of a research design, performance of archival research and the field survey, and reporting results of these efforts.

Evaluation. This section provides guidance on determining whether resources identified meet the criteria of significance. The process under which the criteria are applied and the preparation of an inventory of historic properties is discussed.

Registration. The standards and guidelines for registration provide procedures for and purpose of registration programs. The types of documentation that should be included as part of the process is also discussed.

Historical Documentation. This is the first of three sets of documentation standards. In general, documentation encompasses a wide variety of treatment options designed to preserve or protect properties or to document their historic values and information. Historical documentation provides information related to the significance of a given property to many historic preservation specialists (e.g., historians, architects, archaeologists). It can be used early

in the planning process to assist with identification and evaluation activities, or as part of a complete treatment plan to be applied to significant properties. Critical to effective historical documentation is the development of a sound research design with specific objectives and carefully selected research methods.

Architectural and Engineering Documentation. These standards and guidelines address the documentation of historic buildings, sites, structures, and objects. This generally includes measured drawings, photographs, and textual information. Within the guidelines are specific procedures for the development of HABS/HAER documentation.

Archaeological Documentation. Like the previously discussed standards for documentation, archaeological documentation can be appropriate at any time during the historic preservation process. Activities can include archival research, observation, and recordation of both aboveground and belowground resources. Objectives and methods must be carefully defined and are most often contained within a research design. Curation of materials and records recovered during the project and the reporting of results of the investigation complete the archaeological documentation process.

Historic Preservation Projects. Eight general standards and associated specific standards are provided for the treatment of historic properties. Topics discussed include acquisition, protection, stabilization, preservation, rehabilitation, restoration, and reconstruction. The guidelines provide extremely detailed procedures for the effective implementation of the previously stated treatment options.

Professional Qualification Standards. These qualifications were originally published as Appendix A to 36 CFR Part 61 but have been revised and published on June 20, 1997, in Volume 62, Number 119 of the Federal Register (Appendix F). These standards define the minimum education and experience required to perform the historic preservation activities addressed within the Secretary's *Standards and Guidelines*.

2.2.6 Protection of Archaeological Resources; 43 Code of Federal Regulations Part 7

Protection of Archaeological Resources provides regulations implementing the ARPA. Identical versions of Subpart A, Uniform Regulations, were issued as 32 CFR Part 229 for the Department of Defense (DOD). Among the procedures provided are those that relate to:

2.2.7 Department of the Interior, Curation of Federally Owned and Administered Archaeological Collections; 36 Code of Federal Regulations Part 79

This regulation requires that staff and consultants responsible for the curation, management, and preservation of archaeological collections be qualified museum professionals. Items should be handled, stored, cleaned, and conserved in an appropriate manner; if items are exhibited, the collection shall be exhibited in a manner appropriate to the nature of the material remains and associated records, protected from breakage and/or deterioration, and preserved so that it may be studied in future laboratory analyses. Site forms, field notes, artifact inventory lists, computer disks and tapes, catalog forms, and a copy of the final report shall also be curated in a manner that protects them from theft, fire, or other damage. Collections should be periodically inspected and monitored for damage and deterioration, as well as inventoried to verify the location of material remains, associated records, and other federal personal property that is furnished to the repository in accordance with Section 79.11. Access to the collection for scientific, educational, and religious purposes shall also be provided in accordance with Section 79.10.

2.2.8 Eagle Permits, Permits for Indian Religious Purposes; 50 Code of Federal Regulations Part 22.22

This regulation permits the possession, taking, and transportation of golden and/or bald eagles or their parts, eggs, or nests for religious use for Native American religious ceremonial or cultural activities. This regulation requires individuals to submit a completed application form to the Department of the Interior providing the basic information, such as name and address, certification from the Bureau of Indian Affairs (BIA) showing Native American heritage, and certification from an authorized official of the religious group performing bona fide tribal religious ceremonial or cultural activities.

For the preservation of bald and golden eagles, the Secretary may permit or deny the possession, taking, or transportation of specimens for agricultural or scientific societies, exhibition by public museums or zoological parks, or religious purposes of Native American tribes.

2.2.9 National Historic Landmarks Program; 36 Code of Federal Regulations Part 65

NHLs are a special category of historic property so designated by the Secretary because of their national importance in American history, architecture, archaeology, engineering, or culture. Section 800.10 of the Council's implementing regulations for the NHPA (36 CFR Part 800) and Section 110(f) of the NHPA specify special protection for NHLs.

2.2.10 National Natural Landmarks Program; 36 Code of Federal Regulations Part 62

The National Natural Landmarks Program was established in 1962 under the authority of the Historic Sites Act of 1935. A National Natural Landmark is a nationally significant natural area that has been designated by the Secretary. To be nationally significant, a site must be one of the best examples of a type of biotic community or geologic feature in its physiographic province. Examples of the natural diversity include terrestrial and aquatic ecosystems, features, exposures, and land forms that record active geologic processes as well as fossil evidence of biological evolution. The goal of the National Natural Landmarks Program is to identify, recognize, and encourage the protection of sites containing the best examples of geological and ecological components of the nation's landscape.

2.3 EXECUTIVE ORDERS AND PRESIDENTIAL MEMORANDA

2.3.1 Executive Order 11593, Protection and Enhancement of the Cultural Environment, May 13, 1971

EO 11593 directs federal agencies to provide leadership in preserving, restoring, and maintaining the historic and cultural environment of the nation; to ensure the preservation of cultural resources; to locate, inventory, and nominate to the National Register all properties under their control that meet the criteria for nomination; and to ensure that cultural resources are not inadvertently damaged, destroyed, or transferred before the completion of inventories and evaluations for the National Register. The intent of EO 11593 was integrated into NHPA, Section 110 through the 1980 amendments to the statute.

2.3.2 Executive Order 13007, Indian Sacred Sites, May 24, 1996

EO 13007 directs that access to Native American sacred sites for ceremonial use by Native American religious practitioners be accommodated on federal lands. It also directs that the physical integrity of sacred sites be protected and that the confidentiality of these sites be maintained. It further directs that procedures be implemented or proposed to facilitate consultation with appropriate Native American tribes and religious leaders.

2.3.3 Executive Order 13175, Consultation and Coordination with Tribal Governments; (Final November 6, 2000 , Effective January 6, 2001)

Effective January 6, 2001, this EO emphasizes consultation with Indian tribal governments and respect for tribal sovereignty as agencies develop policy on issues that impact Indian communities. The EO establishes specific requirements that the U.S. Government must follow as it develops and carries out policy actions that affect Indian tribes. The EO builds on prior actions (e.g., EO 13084) and strengthens government-to-government relationships with Indian tribes.

2.3.4 Memorandum for Heads of Executive Departments and Agencies, April 29, 1994: Government-to-Government Relations with Native American Tribal Governments

This memorandum calls for consultation between federal agencies and federally recognized Native American tribes on a government-to-government basis. The designated tribal representative will be treated as the representative of a government. Consultation shall occur formally and directly between the head of the federal agency and the tribal leader.

2.3.5 Memorandum for Heads of Executive Departments and Agencies, dated April 29, 1994: Policy Concerning Distribution of Eagle Feathers for Native American Religious Purposes

The religious practices of Native Americans are protected by AIRFA. Native Americans are also permitted the use of eagle feathers for religious, ceremonial, or cultural activities by 50 CFR Part 22.22. This memorandum requires Installation Commanders to collect and transfer eagle body parts and carcasses for use in Native American religious activities. Any carcasses considered salvageable should be shipped to the U.S. Fish and Wildlife Service, Forensic Laboratory.

2.4 U.S. ARMY REGULATIONS, PROTOCOLS, AND GUIDELINES

The primary AR governing the management of cultural resources is AR 200-4, *Cultural Resources Management*, and the accompanying pamphlet (PAM), DA-PAM 200-4. These and related regulations are summarized in this subsection in numerical order.

2.4.1 Army Regulation 200-1, Environmental Protection and Enhancement (May 23, 1990)

AR 200-1 prescribes Army responsibilities, policies, and procedures to preserve, protect, and restore the quality of the environment. The primary areas covered include hazardous material and hazardous waste management, water resources, and air quality; however, AR 200-1 also establishes environmental quality goals to protect and conserve natural and cultural resources. Applicable to the management of cultural resources are procedures to ensure early consideration and evaluation of the effects upon the environment resulting from any proposed action (as required by the NEPA and further defined in AR 200-2). Programs and activities will be implemented to prevent or minimize these effects to the extent possible. Specifically, Section 1-39 stipulates that:

1. National Register-eligible cultural resources under Army jurisdiction “will be managed in a spirit of stewardship for the inspiration and benefit of present and future generations.”
2. Commanders and state adjutants will protect the religious rights of Native Americans by granting access to sites, use and possession of sacred objects, and practice of ceremonial and traditional rites.
3. The conservation of cultural and historic resources will be promoted through the implementation of an integrated, multi-use, natural resource and land management program.

AR 200-1 further requires the development of methods and procedures for cultural resources management (Section 2-1(4)(i)). Consideration of areas of cultural, historical, or archaeological significance is to be included in the preparation of environmental baseline surveys (EBSs) prepared pursuant to any real property transaction (Section 12-5(c)(2)(a)).

2.4.2 Army Regulation 200-2, Environmental Effects of U.S. Army Actions (March 21, 1997)

The Army is committed to environmental stewardship in all actions as an integral part of the Army mission. AR 200-1 implements the "U.S. Army Environmental Strategy into the 21st Century." This strategy is to:

1. Focus efforts on pollution prevention where and when possible to reduce or eliminate pollution at the source.
2. Conserve and preserve natural and cultural resources so they will be available for present and future generations to use.
3. Give priority to sustained compliance with all applicable environmental laws.
4. Continue to restore previously contaminated sites deemed as a threat to human health and the environment.

This regulation supplements federal, state, and local environmental laws for preserving, protecting, and restoring the quality of the environment. It also integrates pollution prevention, natural and cultural resources, and the NEPA into the Army Environmental Program.

Section 15-4 stipulates that:

The Army's goal is to manage the cultural resources under Army control in compliance with the federal laws and in a spirit of stewardship of America's historic and cultural heritage. Cultural resources include those places, objects, documents, collections, and customs covered by several public laws and regulations. Compliance with these laws will be integrated with NEPA compliance and with planning and execution of any undertakings, projects, activities or programs that may affect cultural resources.

2.4.3 Army Regulation 200-3, Natural Resources, Land, Forest, and Wildlife Management (February 28, 1995)

AR 200-3 sets forth procedures for the conservation, management, and restoration of land and natural resources. Resources considered include soils, vegetation, water, croplands, rangelands, forests, and fish and wildlife species. Archaeological sites are specifically designated as one of the special considerations applicable to the development, design, construction, and maintenance of an installation and the performance of its mission. Cultural resources in general are included throughout the regulation in discussions of environmental considerations and associated procedures in accordance with the NEPA process (e.g., prohibiting off-road vehicle activities in areas containing archaeological sites, historical sites, petroglyphs, or pictographs).

2.4.4 Army Regulation 200-4, Cultural Resources Management (October 1, 1998)

AR 200-4 (see Appendix A) prescribes policies for the management of cultural resources under the jurisdiction of the Army and designates responsibilities for cultural resources management within the Army, including the Army staff level, Installation Commander, or Commander's representative. The regulation provides general procedures required to maintain compliance with federal legislation regarding cultural resources when engaging in various Army activities and provides specific procedures to follow for the development of PAs and MOAs, under Section 106 of the NHPA, National Register nominations, and CAs or Plans of Action under NAGPRA.

Department of the Army Pamphlet 200-4, Cultural Resources Management

(October 1, 1998). This pamphlet offers guidance for implementation of the Army's policies provided in AR 200-4, *Cultural Resources Management*; establishes a comprehensive cultural resources management and planning strategy; offers an overview of applicable federal legislation; and provides miscellaneous information regarding ICRMPs.

2.4.5 Army Regulation 210-20, Master Planning for U.S. Army Installations (1991)

AR 210-20 describes the real property master planning processes, especially those pertaining to the development of the Real Property Master Plan (RPMP). The RPMP is based on installation mission and guidance from related planning documents and provides direction for the development of the installation. Among the desired results of RPMP implementation is the

identification, protection, and enhancement of natural, cultural, and environmental resources; identification of environmental compliance issues; and facilitation of good stewardship of the environment. The considerations associated with these goals include: (1) the assessment of real property master planning in compliance with NEPA; and (2) incorporation of environmental (including historic preservation) reports and plans as supporting documentation to the real property master planning process.

The specific application of AR 210-20 to cultural resources management includes the development of a cultural resources baseline analysis. This presentation provides input to the discussion of environmental concerns and constraints to development, as well as the identification of information gaps to be filled through surveys and studies. An overlay graphically depicts the environmental conditions specified in the narrative. An environmental analysis of effects resulting from implementation of the Capital Investment Strategy (CIS) on cultural resources (and other areas as applicable) is designed to assess future impacts early in the planning process. Environmental documentation in support of all components of the RPMP is usually generated on a programmatic level. Among the sources of supporting information to the RPMP listed in AR 210-20 are the Historic Preservation Plan (HPP) and other cultural resources management plans.

2.4.6 Army Regulation 405-80, Granting Use of Real Estate (October 10, 1997)

AR 405-80 describes procedures for making military real estate under the control of the Army available to other agencies, groups, and individuals. Specific guidelines for leases of Army lands and real property are also provided. Surveys are conducted to determine any surplus lands available, designating them excess and underused. The Army will not authorize use by others if it conflicts with provisions of environmental policies and legislation, including the NEPA and the NHPA. An environmental analysis is conducted to document the environmental consequences of the proposed outgrant; the analysis is incorporated into a Determination of Availability submitted to the appropriate authorities for approval prior to granting use. Other information pertinent to cultural resources in the Determination of Availability includes statements regarding the inclusion of the property in the National Register and consideration given to requirements of the NHPA. Provisions are also set forth in AR 405-80 to allow, with

the approval of the Secretary of the Army, the examination of archaeological ruins, the excavation of archaeological sites, and the collection of objects of antiquity on Army lands by qualified institutions. An ARPA permit may also be required.

2.4.7 Army Regulation 405-90, Disposal of Real Estate (May 10, 1985), including Army Materiel Command Supplement (April 1, 1987)

Procedures for the disposal of military real estate are contained in AR 405-90. Among the procedures provided are:

- Preparation of recommendations to excess real property
- Disposal of nonexcess property and the acquisition of replacement land, construction, or facilities
- Disposal of property by the General Services Administration (GSA)
- Return of withdrawn public domain lands, as appropriate
- Disposal of property by the DA.

Special considerations stipulated in AR 405-90 include compliance with environmental, historical, and cultural protection requirements. Among additional requirements for disposal of property that contains historical or cultural resources are: (1) Headquarters, Department of the Army (HQDA) approval of DA Form 337 (*Request for Approval of Disposal of Buildings and Improvements*) for historic sites or properties; and (2) special procedures for the protection and maintenance of historic properties declared excess or surplus (documented in Technical Manual [TM] 5-801-2).

2.4.8 Army Regulation 415-15, Military Construction, U.S. Army (MCA) Program Development (August 30, 1994)

This regulation supercedes AR 415-13 (Military Construction, U.S. Army Disposal of Structures - May 1, 1984) and defines procedures associated with Army military construction and repair, with emphasis on the programming and execution phases. Military construction is considered a single undertaking and may include:

- The erection, installation, or assembly of a new facility
- The addition, expansion, extension, alteration, relocation, or replacement of an existing facility
- Site preparation, excavation, filling, landscaping, land improvements, utility connections, and installed equipment
- Related real property requirements.

These activities have the potential to adversely affect significant cultural resources either through ground disturbance, modification of historic buildings or structures, or alteration of the visual integrity of a given site or district. Preparation and submittal of environmental documentation that addresses possible effects is conducted as part of the predesign activities. Compliance with the NHPA requirements is specifically discussed in Section F-4, *Preservation of Historic Properties and Archaeological Sites*. The appropriate treatment of archaeological sites contained within a proposed project area focuses upon (1) advance planning to conduct the appropriate investigations early in the project; and (2) protecting previously unknown archaeological finds until required clearances have been obtained.

2.4.9 Army Regulation 420-10, Management of Installation Directorates of Engineering and Housing (July 2, 1987)

This regulation sets forth the responsibilities, organization, and function of the Directorate of Engineering and Housing (DEH). It also defines appropriate levels of maintenance and repair for facilities, depending upon their current and planned use. Among the responsibilities of the DEH is the management of the environmental program and the management of real property (e.g., construction, repair, demolition). The DEH is also the designated manager of the cultural resources program and is responsible for ensuring compliance with all appropriate regulations and legislation. Finally, AR 420-10 establishes responsibilities and procedures for the implementation of U.S. Army Corps of Engineers (USACE) Installation Support (IS).

**2.4.10 Army Regulation 420-17, Real Property and Resource Management
(December 13, 1976)**

AR 420-17 addresses the management of facilities engineering real property and resources. Among the discussions pertinent to cultural resources management are those related to the administration of the real property account. AR 420-17 includes recording and accounting procedures associated with various real property transactions, including, but not limited to, real property record cards, disposal of buildings and improvements, and outleases.

**2.4.11 Army Regulation 420-22, Preventative Maintenance and Self-Help
(February 27, 1986)**

This regulation addresses the Army's preventive maintenance programs and self-help programs. The preventive maintenance program includes care, servicing, and inspection of buildings and structures to accomplish minor maintenance. The self-help program facilitates limited maintenance, repair, and minor improvements by military personnel in family housing areas. Occupants of National Register-eligible or -listed buildings must coordinate with the installation Cultural Resources Manager (CRM) before undertaking self-help projects.

2.4.12 Technical Manual 5-801-1, Historic Preservation: Administrative Procedures

TM 5-801-1 provides guidance for the protection of cultural resources on Army-controlled lands. Although considered obsolete, this TM is still referenced. Additional information is provided in TM 5-801-2.

**2.4.13 Technical Manual 5-801-2, Historic Preservation: Maintenance Procedures
(considered obsolete but referenced)**

Like TM 5-801-1, TM 5-801-2 is considered obsolete; however, this manual stipulates Army policy and offers regulatory guidance on historic preservation.

2.5 UMATILLA CHEMICAL DEPOT LEASES AND LAND USE AGREEMENTS

With one exception (discussed below), the lands leased at UMCD are held by various federal organizations. These UMCD tenant organizations (see Section 3.1.3) operate either under interservice support agreement or outgrant agreements, rather than leases. If improvements are required, the lessee must contact UMCD and clear the activity through the UMCD Industrial Risk Manager (IRM). The tenants are responsible for maintaining the land and for keeping it clean and free of contamination. Parcel improvements require coordination with UMCD and clearance from UMCD IRM.

The following organizations currently lease facilities at UMCD:

- Oregon Army National Guard, which conducts tank simulator and real-time training in the southwestern portion of the Depot.
- Program Management Office for Chemical Stockpile Demilitarization (PMCSO), which is a separate Army Command in charge of the destruction of chemical weapons nationwide.
- USACE (Seattle and Huntsville districts), which supports the construction of the incinerator and UMCD support infrastructure upgrades.
- Science Applications International Corporation (SAIC), which is the PMCSO support contractor.
- The Health Clinic detachment from Madigan Army Hospital.
- Washington Demilitarization Company (WDC), which is the prime contractor for construction of the Chemical Agent Demolition Facility, and which will operate the facility once it has been built. WDC operates under a more conventional lease arrangement and gets approval through UMCD IRM prior to attempting to make any improvements, WDC is responsible for caring for the land in the same manner as the government agency tenants.

2.6 OTHER GUIDANCE APPLICABLE TO UMATILLA CHEMICAL DEPOT

There are no MOAs, PAs, Memoranda of Understanding (MOUs), CAs, or other agreement documents affecting cultural resources currently in force at UMCD.

2.6.1 Umatilla Chemical Depot Regulations

No UMCD regulations have been adopted pertaining to cultural resources.

2.6.2 Umatilla Chemical Depot Digging Permit

UMCD has a standard form excavation permit. The Director of Public Works authorizes final approval for digging of any nature on the installation after subapprovals are granted from the IRM, Chief of Services Division, and the Chief of Support Division. A copy of the UMCD Excavation Permit is provided in Appendix G.

2.6.3 Umatilla Chemical Depot Native American Access Procedures

The Treaty of 1855 gives the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) certain rights to natural resources and traditional cultural properties (TCPs) or properties of cultural significance for Native American tribes, although those rights have never been requested or exercised at UMCD. In addition, the NHPA, ARPA, NAGPRA, and AIRFA of 1978 establish policies for consulting with Native American tribes on the management of, and access to, significant resources. The UMCD Commander has the authority to grant reasonable access to all areas of the Depot that are not otherwise restricted. However, because of the potential for unexploded ordnance at UMCD, and because of the nature of the chemical stockpile mission at UMCD, access to many areas of the Depot requires strict coordination with UMCD and permission from the Depot's security offices.

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3.0 PLANNING LEVEL SURVEY

Chapter 3.0 provides background information essential to understanding the cultural resources environment of UMCD. This section presents the results of a literature review (both historic and recently prepared documents), archaeological site and map file searches, photograph reviews, interviews with individuals knowledgeable of the resources within the region, and a site visit to UMCD, which included an installation tour.

This section also provides a brief description of the past and present missions of UMCD; describes the environmental setting of the installation; presents the results of past archaeological and historical investigations; lists the local and regional Native American groups and agencies having interest in UMCD's cultural resources; and discusses predictive models/sensitivity assessments for the different classes of cultural resources found on the installation.

In addition, this section summarizes all of the prehistoric and historic contexts with which installation cultural resources would be associated. This element of the text is not intended to be a comprehensive discussion of the prehistory and history of UMCD; rather, it is provided as a brief baseline from which readers and/or users of the document can associate cultural materials identified at the installation. For additional detail, readers are referred to the large body of literature cited within the document and/or found in the reference list provided in Chapter 9.0.

3.1 MISSIONS—PAST AND PRESENT

UMCD is an active Army complex whose historical, primary mission has been to store, preserve, and maintain both conventional and ammunition stocks and to maintain existing facilities and equipment to ensure minimal deterioration. Changes in the Depot's military mission from 1941 to 1995 were initiated with BRAC and are to continue through the foreseeable future, through the Chemical Stockpile Disposal Program (CSDP) and, possibly, closure.

3.1.1 Past Missions

UMCD's past missions include:

- 1941-1945: UMCD stored chemical-filled munitions and containerized chemical agents, in addition to repackaging and storing conventional munitions.
- 1945-1962: UMCD's mission was expanded to include ammunition maintenance, renovation, and demolition.
- 1962-1973: UMCD's mission was expanded to include storage of chemical agent-filled munitions and 1-ton containers of chemical agents in K Block igloos and in Building 659, in addition to storing conventional munitions in magazines and igloos in A through J Blocks.
- 1973-1988: UMCD's mission was redesignated as an "activity" of TEAD, and most of the conventional munitions were either transported to HWAD or demilitarized.

3.1.2 Present Missions

UMCDs current mission is the ongoing storage of chemical munitions. However, this will change with the full implementation of CSDP and subsequent closure of the Depot. UMCD has been placed under the SBCCOM with ultimate closure of the facility anticipated. Anticipating that, a major shift has occurred in the UMCD contemporary mission, to wit: the actual physical disposition of chemical weapons. Construction began in June 1997 on the Umatilla Chemical Agent Disposal Facility and is presently ongoing, and when completed, the facility will include 6 buildings covering some 189,200 square feet of built space.

Given the fact that there is no longer a need for chemical weapons stockpiles, that the risk of storage increases with time as stockpiles slowly deteriorate, and that Congressional mandates and provisions of the Chemical Weapons Convention require destruction of chemical weapons, the ultimate need to eliminate all stockpile configurations from UMCD (e.g., M55 rockets, bombs, projectiles, land mines, bulk containers and aerial spray tanks holding chemical agent-type Nerve [VX, GB] and Blister [HD, mustard] agents) has become the Depot's primary objective. Currently, the disposal facility is scheduled to be completed in February 2003.

Testing exercises will overlap with construction processes. Prior to operations, however, the plant will undergo a series of final tests to insure that the plant, procedures, and workers will be ready for the actual disposal of the chemical weapons. Thereafter, operations are scheduled to last approximately 4 years, with closure of the disposal facility estimated to take an additional 2 years. By law, no materials other than chemical weapons can be processed through the plant, and the disposal facility must be dismantled when the chemical weapons are gone.

3.1.3 Current Umatilla Chemical Depot Tenants and their Missions

Currently, there are six tenants at UMCD. These tenants, as well as their missions, are identified as follows:

Oregon National Guard currently uses a small portion of the Depot for military training, including a rifle range and a small area for tracked vehicle maneuver. The tank simulator and real-time training are conducted in the southwest portion of the Depot. The actual physical training area is the old jeep storage lot southwest of the 100-series warehouses and west of the old ammunition-peculiar equipment building.

Madigan Army Hospital operates a Health Clinic detachment at UMCD.

The Program Management Office for Chemical Stockpile Demilitarization (PMSCD), which is a separate Army Command in charge of the destruction of chemical weapons nationwide, maintains a presence at UMCD in relation to the chemical agent disposal facility discussed in subsection 3.1.2.

USACE, Seattle and Huntsville Districts, maintains offices at the Depot in support of UMCD infrastructure upgrades and construction support on the chemical agent disposal facility project.

SAIC is the PMSCD support contractors who maintain offices at the Depot relative to the on-going chemical agent disposal facility construction project.

Washington Demilitarization Company, as the prime contractor for the construction of the chemical agent disposal facility, maintains a presence at UMCD. Once the incinerator facility is completed, Washington Demilitarization will be its operator, overseeing daily operations.

3.2 HISTORIC CONTEXT

3.2.1 Prehistory

UMCD is within the “Plateau” prehistoric culture area of North America (Jennings 1974 as in Cleland et al. 1987). A nearly 10,000-year sequence of human occupation has been documented for this region, but its prehistoric occupation is still not well understood, especially in upland areas, as most studies have focused on the river systems. This region is characterized by extensive lava flows and badlands deeply incised by strong-flowing rivers. Throughout the prehistory of this region, human populations have focused on riverine resources. Hunting and gathering in the uplands supplemented the riverine subsistence to varying degrees. Upland resources varied somewhat with the major climatic phases of the Holocene, but they have remained relatively poor since the arrival of humans over 9,000 years ago (Jennings 1974). Agriculture was never practiced by Native Americans on the plateau until after the arrival of Euro-Americans in the nineteenth century (Cleland et al. 1987).

At contact, the occupants of the area around UMCD were the Umatilla Indians. They lived in semipermanent villages and made their living mostly from the migrating salmon that spawned in the Columbia River and its tributaries for 6 months out of the year. The Umatilla used upland areas, including present-day UMCD land, for seasonal hunting and gathering of plants. They were Sahaptin speakers, part of the larger Penutian language family. Ancestral Sahaptins are believed to have begun occupation of the area as early as 6,000 years ago (Cleland et al. 1987).

The prehistoric occupation of the plateau was influenced by three major climatic changes that occurred after the glaciers retreated from the plateau at the end of the Pleistocene (Antevs 1948, 1955, Hansen 1947, in Cleland et al. 1987). A very cold and wet climate welcomed the first immigrants, but this soon changed to a cool, moist climate, similar to today’s climate. This milder climate lasted from about 9,000 to 8,000 years ago. This period was followed by 4,000 years of hotter, dryer weather. The onset of this dryer period might have prompted major

population shifts from the Great Basin to the plateau. About 4,000 years ago, the climate once again shifted to the relatively wet and cool environment we see today. The increased water runoff probably destabilized the major drainages and adversely affected fishing for several centuries, causing a temporary shift in subsistence. These climatic phases roughly coincide with the broad cultural chronology described by Shalk, which divides the prehistory of the region into two major periods. These were an extended Paleo-Indian period, and a period characterized by fishing and increased sedentism that lasted until European contact (Tetra Tech 2000). Although very few prehistoric remains have been found at UMCD, a more specific chronology for the area has been proposed in the Archaeological Overview and Management Plan for the facility (Cleland et al. 1987). It is based on numerous studies on the Columbia Plateau (Browman and Munsel 1969; Daugherty 1962; Drumond and Minor 1983; Leonhardy and Rice 1970; Nelson 1969, 1971; Rice 1972; Shalk 1980; Swanson 1962; Toepel, Warren 1968) and uses projectile point types to define different phases or periods. The six prehistoric periods are described below.

3.2.1.1 Period I (8000 to 6000 Before Christ [B.C.]).

This period marks the initial settlement of the region by human beings. These earliest occupants were part of the Paleo-Indian tradition, which left its mark throughout North America. These were highly mobile hunter-gatherers who lived in small groups and occupied seasonal camps near resource areas. They generally focused on large game animals but also fished and gathered shellfish and plants. Their tool kit included large lanceolate “Windust” projectile points, fluted projectile points, crescents, and edge-ground cobbles. Toward the end of this period, they began to use milling stones.

3.2.1.2 Period II (6000 to 4000 B.C.).

People continued to live in small, mobile groups during this period, establishing camps near seasonal resources. Hunting appears to have become less important, as subsistence shifted more towards riverine resources. Shellfish gathering especially seems to increase. Increased use of milling stones suggests more emphasis on plant utilization. A characteristic artifact of this

period is the large, leaf-shaped “cascade” projectile point. People of this period also used oval knives, large scrapers, edge-ground cobbles, and antler and bone implements.

3.2.1.3 Period III (4000 to 1500 B.C.).

People generally remained mobile and continued to follow seasonal resources. Subsistence practices became more diversified, however. Gathering of shellfish and plant foods were the primary subsistence activities, while hunting and fishing were secondary. It was during this period that regional specialization began to appear. Large, side-notched “Northern,” “Bitterroot,” or “Cold Springs” projectile points were used, as well as manos and metates, and mortars and pestles.

3.2.1.4 Period IV (1,500 B.C. to 250 Anno Domini [A.D.]).

This period is marked by major changes in settlement and subsistence and influence from cultures north of the Columbia Plateau. The people of this period still utilized seasonal camps, but they built permanent dwellings in the form of pit houses, an introduction from the north. Art styles and woodworking technology also reflected influences from the north. Fishing became the primary subsistence activity, while hunting and gathering continued on a smaller scale. The contracting- or tang-stemmed “Frenchman Springs” or “Rabbit Island” projectile points are diagnostic of this period. Other tools used were microblades, notched net-sinkers, hopper mortars, pestles, antler and bone wedges, mauls, stone celts, and bone hunting and fishing implements.

3.2.1.5 Period V (250 to 1730 A.D.).

This period saw a continuation in the trend towards sedentism and a fishing-based economy. People of this period occupied large, winter pithouse villages on the Columbia River floodplains and at the mouths of major tributaries. Small camps were still utilized seasonally for fishing, hunting, and gathering. Subsistence was similar to the ethnographically known pattern for the Columbia Plateau. Projectile points were small (perhaps reflecting the introduction of the bow

and arrow) and took on a variety of forms. People of this period also used tailed end-scrapers, cobble choppers, notched net-sinkers, mauls, pestles, block and slab millingstones, shell beads, and bone harpoon heads.

3.2.1.6 *Period VI (1730 to 1810 A.D.).*

This was the period when European and American trade goods reached the Columbia Plateau prior to the actual arrival of Euro-Americans. The most important event of this period was the introduction of the horse, which greatly increased the social and economic opportunities of the people of the Columbia Plateau. Contact with neighboring groups increased, especially contact with Plains Indians, and more trade items made their way into the region. Important fishing sites became trading centers, and villages became larger and fewer. Bison, which were rare on the plateau, became an important resource, as hunters were now able to travel and hunt on horseback. Small projectile points were used during this period, but the period is characterized more by Euro-American trade goods, including glass and copper beads, and a variety of iron implements.

3.2.2 *History*

European and American vessels were exploring and even trading along the Oregon coast as early as the 1770s, and the United States claimed possession of the “Oregon Country” after Captain Robert Gray discovered the mouth of the Columbia River in 1792 (National Park Service 1997). The interior remained unexplored through the eighteenth century, but trade goods and European diseases had a profound impact on the native peoples of Oregon long before actual contact with nonnatives. Exploration of the Columbia Plateau would not begin until the start of the nineteenth century with the arrival of the Lewis and Clark expedition. The next few decades of exploration and settlement by Euro-Americans resulted in the decimation and displacement of native populations. Larger migrations of Euro-Americans and Chinese would be spurred on by the discovery of gold in 1860. As the gold fields played out, however, many of these new immigrants turned to ranching and eventually irrigation farming. By the beginning of the twentieth century, the landscape had been transformed by new settlement and irrigation agriculture. Through the early twentieth century, cities grew with the agriculture-based

economy. Then came the military and the depot, which has supported all war efforts since World War II, including the Korean Conflict, Vietnam, Grenada, Panama, and Desert Shield/Desert Storm (Program Management Office for Chemical Stockpile Demilitarization 1999).

The history of the Umatilla area can, therefore, be divided into four major periods (Cleland et al. 1987): the Exploration/Pioneer Period (1805-1860); the Gold Rush/Ranching Period (1860 to 1900); the Irrigation Agriculture Period (1900 to 1940); and the Industrial Period (1940 to present). Unless otherwise noted, the following summary is based on Cleland et al. 1987.

3.2.2.1 Exploration/Pioneer Period (1805-1860).

Oregon's interior was first described by Lewis and Clark, who crossed the Columbia Plateau during their expedition of 1805-1806. Lewis and Clark had been sent by President Thomas Jefferson to find (among other things) a transportation route between the newly acquired Louisiana Territory and the Oregon Country (National Park Service 1997). Their route through the Oregon Country followed the Columbia River just to the north of UMCD. In fact, they camped at the mouth of the Umatilla River on their journey west. In 1811-1812, Wilson Price Hunt led the Astor party from St. Louis to the newly founded American fur trading post, Astoria, on the Oregon coast. They came by way of the Snake River, Blue Mountains, and Umatilla River to the Columbia River, then to the coast. When John Stuart returned from Astoria to St. Louis by a similar route in 1812, a local newspaper reported that, based on Stuart's information, it might be possible to cross the continent by wagon. Although there was no immediate migration west, in later years, settlers would begin to follow this route to the Oregon Country, and it would become known as the Oregon Trail.

The American presence in Oregon in the early 1800s consisted of a few trappers and traders. The fur trade was suppressed by the War of 1812, and Astor was bought out by the North West Company. The North West Company built Fort Nez Percés on the Columbia at the mouth of the Walla Walla River. When the North West Company was bought out by the Hudsons Bay

Company in 1821, the fort became a district headquarters and outfitting post for Snake River expeditions.

In the 1830s, Protestant missionaries began to move into the Oregon Country. They established missions in the Willamette Valley in 1834, at Waiilatpu in 1836, and at the Dalles in 1837. The stories these missionaries sent back east sparked interest in the region, as did the book *The Adventures of Captain Bonneville*, published in 1837. In 1841, the U.S. Government sent another expedition to Oregon to assess the potential for new settlement. The expedition was led by Lt. Charles Wilkes. Another explorer, John C. Fremont, traveled in the area of the Blue Mountains and Umatilla River in 1843. Wilkes reported a population of 700 to 800 nonnatives, most of whom were Canadian traders and trappers. Information provided by Wilkes and Fremont would soon be used by immigrants from the east. In 1845, an estimated 3,000 persons entered Oregon, most by way of the Oregon Trail. Immigrants continued to follow this trail into Oregon for the next 2 decades. One variant of the trail crossed the Deschutes-Umatilla Plateau from the Blue Mountains and followed the Umatilla River to the Columbia, passing just to the east of UMCD's present location. Remnants of wagon trails still visible on UMCD today are thought to be spurs of this trail.

The massive migration of Americans into Oregon forced negotiations between the United States and Great Britain, both of which claimed jurisdiction over the Pacific Northwest. A treaty in 1846 established the 49th parallel as the international boundary. Congress made Oregon a territory in 1848, and in 1853, the portion north of the Columbia River became the Washington Territory. The remaining portion became the state of Oregon in 1859.

The migration of Americans into Oregon had also caused conflicts with the indigenous tribes of the region. Attacks on wagon trains and White settlements were reported, as well as indiscriminate retaliation by settlers and the military. In 1847, a measles epidemic wiped out one-half of the Cayuse tribe (Umatilla County Historical Society n.d.). The Whitman Massacre of 1847, a Cayuse attack on the Whitman Mission, was followed by the Cayuse War of 1848. The earliest attempted settlement in the Umatilla area, a French Canadian mission near present-day Pendleton, was abandoned as a result of the Whitman Massacre. Hostilities ceased after the

Cayuse War, but tensions remained, and for several years, migration into eastern Oregon was halted. In 1854, negotiations began with Indians of eastern Oregon. At a meeting near the old Whitman Mission, the Umatilla, Cayuse, and Walla Walla agreed to move to the Umatilla Reservation near present-day Pendleton, but hostilities erupted almost immediately after the agreement as prospectors began moving onto unceded Yakima land following new gold discoveries at Colville. All American settlers, as well as some French settlers, in the Umatilla and Walla Walla valleys fled to Fort Dalles. Finally, in 1858, American victories in Washington and Idaho essentially ended the war with the Oregon tribes. The Umatilla, Cayuse, and Walla Walla began moving to the Umatilla Reservation in 1860.

3.2.2.2 Gold Rush/Ranching Period (1860-1900).

The land east of the Dalles was open for settlement once again by the fall of 1858. By 1860, an estimated 155 people had claimed land along the Umatilla River. In that same year, gold was discovered in the Clearwater area of Idaho. The only practical way to reach the new gold fields was by crossing the Columbia Plain. The gold rush across the plain resulted in the development of roads, steamship lines, new settlements, and county government. In the early 1860s, a supply center was established by a “Mr. Spencer” at the mouth of the Umatilla River in an abandoned cabin. A settlement known as Umatilla Landing (now Umatilla) quickly grew up around this supply center. A large Chinese population made up of ex-miners, cooks, laundrymen, merchants, and boat landing workers, occupied the outskirts of the settlement. Umatilla became a market center for ranchers and farmers who had recently moved into the area. In 1865, Umatilla became the county seat of Umatilla County (which then included Morrow County). By 1868, however, new routes to the mines had been established that bypassed Umatilla, and the new town of Pendleton was made the county seat. Farmers and ranchers in the vicinity continued to supply the mines, but Umatilla’s prominence as a trading center waned.

In the 1860s and 1870s, the land around the Umatilla River proved to be much better for raising livestock than for raising crops. Herds owned by several ranchers could roam freely and graze over public land. The lowlands near the stream valleys were especially good grazing lands. However, the 1880s were difficult years for ranchers. As much as 55 percent of the cattle in

Umatilla and Morrow Counties died during the harsh winter of 1880-1881. By this time, some ranges had been overgrazed, and others were being lost to wheat farming. The development of the railroad made wheat farming more feasible because it made the transport of grain less expensive. In earlier years, wheat had to be transported by wagon, whereas livestock could walk itself to market. The coming of the railroad nullified this marketing advantage held by the ranchers. By 1884, Umatilla rail lines were connected with the transcontinental railroad. This brought new economic opportunities as well as new settlers. Fences began to spring up around farms on the once open ranges, further restricting opportunities available to cattle ranchers. Some ranchers moved their operations to southeastern Oregon, and others began to raise cattle on fenced ranches. The success of wheat farming in the Umatilla area encouraged new settlement and more farms. The railroads did more harm than good to the town of Umatilla itself, because its function as a river port became less important.

While cattle ranching diminished in importance in the 1880s, sheep ranching did not. Sheep could continue to graze on land that had been overgrazed by cattle, and they could graze the highlands to the south of the Columbia River in summer. The Northern Pacific Railroad issued leases for sheep grazing on railroad land that crossed the federal ranges. Heppner became a wool shearing and shipping center, and two woolen mills were in operation in Pendleton by 1890. Wool became even more important than wheat in the region between the Dalles and the Umatilla River. Both wool and wheat continued to bring prosperity and growth to the region through the turn of the century.

3.2.2.3 Irrigation Agriculture Period (1900 to 1940).

Early in the twentieth century, private companies attempted to cash in on the region's growing prosperity by developing irrigation systems. The towns of Hermiston, Stanfield, and Irrigon were only train sidings at the turn of the century, but irrigation projects soon turned these into small cities. The Oregon Land and Water Company Canal, less than 1 mile north of UMCD, was completed in 1904. This canal brought water from Umatilla River to Irrigon (formerly Stokes Siding and Grande Ronde Landing). Irrigon quickly became a thriving community. The Oregon Land and Water Company went bankrupt in 1907, but the federal government assumed control

of the irrigation project. Likewise, the town of Hermiston (formerly Maxwell Siding) was created by a private irrigation project, which came to be federally owned. In 1903-1904, Col. J.F. McNaught formed the Maxwell Land and Irrigation Company and secured land and water rights at Maxwell Siding. There he laid out the town of Hermiston and stimulated growth by offering free lots. The company soon sold its canal and water rights to the government, which had been authorized to develop the Umatilla Irrigation Project in 1905. Hermiston became the headquarters of the project, and an estimated 1,800 people were farming the irrigated lands around Hermiston by 1920. Some land west of the Umatilla River had been added to the irrigation project in 1913. This included land that had been part of the Oregon Land and Water Company Project. In 1915, the West Extension Irrigation Canal of the Umatilla Project was constructed across the northwest corner of the Depot. The new oases created by the irrigation projects contrasted sharply with the surrounding sand and sagebrush. Dairy farms, alfalfa fields, vegetable gardens, and orchards sprang up in these irrigated tracts.

The privately owned Westland Irrigation District was just outside UMCD's eastern border. G.W. Hunt had begun digging a canal in the district as early as 1881 after securing water rights on the Umatilla River. The Hinkle Ditch Company took over the project in 1903 and extended the canal. In 1908, the project was taken over by the Western Land and Irrigation Company, who built additional canals, distribution ditches, gates, and a diversion dam. One canal is less than one-tenth of a mile from UMCD's eastern boundary. The company owned land in three sections that now lie within Depot boundaries, and they had proposed to build canals in one of these, but the canals were apparently never constructed.

The Messner-Hinkle Cutoff (or Coyote Cutoff) was constructed in 1915 by the Oregon-Washington Railroad and Navigation Company. This is now the main line of the Union Pacific Railroad and forms the southern boundary of UMCD. In 1916, there was a train stop at Munley, within UMCD, and Westland, less than 1 mile east of the Depot. The small settlement at Westland included a post office and a school. The depot lands seem to have been used almost exclusively as rangelands before its acquisition by the Army in 1940.

Wheat farming and sheep herding generally remained prosperous through the first half of the twentieth century, aided by new machinery and a growing infrastructure and slowed temporarily by overgrazing and the Great Depression.

3.2.2.4 Industrial Period (1940 to present).

During World War I, American soldiers in training camps in the Southern United States began dying of malaria. Because of these deaths, the Army started to look for locations in more arid climates where new training camps could be established. In response to a promotional campaign by the Hermiston Commercial Club, they made a visit to the area west of the Umatilla River, which they found to be a favorable location. They made plans to bring water to the area and set up a training facility, but before these plans could be carried out, the war ended, and the facility was no longer considered necessary. In 1940, when the Army needed to establish a new ammunition and supply depot, they returned to Umatilla. The location had several advantages as a munitions storage site (Building Technology, Inc. 1984). It was a safe distance from the coast, so it could not easily be attacked; it was close enough to northwest posts and ports to allow for transport and shipment. The area was sparsely populated, so the potential for casualties in an accident was decreased, and the climate was relatively mild with low humidity, which was good for long-term storage. Good rail transportation was available in the immediate vicinity. The parcel of land chosen for the Depot was open, undeveloped, and easily acquired from the BLM and private owners (primarily the railroad) (Cleland et al. 1987; Building Technology, Inc. 1984).

Construction began in 1941 on shops, offices, warehouses, family housing, barracks, miles of railroad siding, and the 1,000 igloos that would be used for ammunition storage. As many as 7,000 workers were employed at the peak of construction. Depot jobs paid well, and many new residents were drawn to the area by the high wages (Umatilla Depot Activity 1991). “Umatilla Ordnance Depot” was dedicated on October 14, 1941, and charged with the mission of storage and issue of ammunition, small arms and components, lend-lease, quartermaster supplies, and the storage and processing of vehicles. Less than 2 months after the dedication, the United States entered into World War II. Employees began working round the clock to ship, receive, and store

ammunition. Six employees were killed in 1944 when the bombs in one of the storage igloos exploded (Cleland et al. 1987; Tetra Tech 2000). Much of the civilian work force lived in the community of Ordnance, which the government had built for them in 1943 just outside the Depot's southern entrance. It had a post office, a school, two stores, and a train depot. Many local Native Americans worked at the Depot as well. Italian prisoners of war (POWs) from a camp near Stanfield were brought to the Depot to work, while other POWs worked in canneries. Eventually, the POW camp was moved to the Depot. Migrant workers from Mexico and Haiti were recruited to work in the fields during the war (Boreson 1996).

After World War II ended, activity decreased at the Depot, but large stocks of ammunition were sent there for maintenance and storage or demilitarization, and the Depot remained one of the major employers in the area. Another major employer was the McNary Dam project, which started in 1947. At its peak in 1951, the project employed 3,900 workers, many of whom were residents of Ordnance. Also in 1951, the Union Pacific Railroad established a division point and maintenance yards at Hinkle, approximately 5 miles east of UMCD.

During the Korean War, activity at the Depot increased again. Ammunition was shipped up the Columbia River by barge to Irrigon, then transported overland to the Depot. Three employees were killed during the Korean War when ordnance being loaded onto a train was dropped and exploded (Boreson 1996). Following completion of the dam and the end of the Korean War, the population of Ordnance decreased sharply. In 1958, Ordnance was declared surplus and sold to a local pig rancher.

Ammunition maintenance buildings were constructed at the depot in 1955 and 1958. Between 1957 and 1960, 4,000 acres of adjoining land was added to the Depot property as a safety precaution. In 1962, the Depot was renamed Umatilla Army Depot and given the mission of receiving, storing, issuing, and maintaining toxic munitions. The Depot once again became a major employer in the area during the Vietnam conflict. The Depot shipped munitions to Vietnam from 1965 to 1973. After the Vietnam shipments ceased, the Depot became a reserve storage activity under the command of the TEAD and was renamed UMDA (Umatilla Depot Activity 1991).

About 600 people worked at the Depot in the 1970s and 1980s. In 1990 and 1991, the Depot supported Operation Desert Shield/Desert Storm, shipping over 10,000 short tons of conventional munitions in the first 18 days; 223 shipments and 19,371 tons in all (Horne Engineering 1997). By 1993, the number of employees was reduced to about 200 as a result of BRAC (Marshall 1996). Also as a result of BRAC, the conventional weapons and materials stored at UMCD were transferred, leaving only binary weapons and chemical munitions. UMDA's chemical mission is under control of SBCCOM. Installation Support Services remain under the Industrial Operations Command for the time being. Currently, the Umatilla work force consists of two military officers, about 175 civilian employees, and one tenant activity with an annual civilian payroll near \$9 million. UMCD stores about 12 percent (over 3,700 tons) of the nation's original stockpile of chemical weapons. Eighty-nine of the 1,001 igloos at UMCD store chemical weapons, 64 store binary munitions, two store ammunition for the security force, and two are used by the American Red Cross. The rest (844) are empty (Soldier and Biological Chemical Command n.d.).

In spring 1997, workers broke ground for the construction of an incinerator that will be used to destroy the chemical weapons stored at UMCD. About 900 people are expected to be employed at the peak of construction, at least 600 during the operation of the incinerator. Construction was initially expected to be completed by 2001 and the chemical weapons destroyed by 2004 (Tri-City Herald 1997), but those dates have been pushed back. The incinerator is projected to be complete in 2003.

3.3 UMATILLA CHEMICAL DEPOT NATIVE AMERICAN GROUPS

The Native American groups having potential interest in the preparation of this ICRMP, as well as UMCD activities in general, include the Cayuse, the Umatilla, and the Walla Walla, each of which is a federally recognized tribe, and each of which is represented under the umbrella of the CTUIR. A brief ethnographic sketch of the confederation is provided in Section 7.0, *Native American Consultation Plan*. Names and addresses of individuals to contact are provided in Appendix H.

3.4 CHEMICAL DEPOT ARCHITECTURE AND LANDSCAPE

Typical of many military installations, UMCD's built environment is linked to functional districts, also called units (i.e., land use areas that accommodate specific operations) (see subsection 1.2.3). Within the Depot there exists a variety of architectural themes and designs, most utilitarian in nature, but there is no generally recognized prevailing architectural style such as Greek Revival or Gothic. Instead, there is a mixture of buildings and structures on the Depot, including one- and two-story, brick and wood-frame buildings (see Appendix C, Photos 1-6); large and small concrete structures. Typical of many military facilities, some of the buildings today no longer express the function for which they were originally intended (e.g., warehouses serving as office space).

Landscaping at UMCD consists of trees, shrubs, and lawns in and around the main administrative area, which is in contrast to the surrounding sagebrush and wild native grasses (Building Technology Inc. 1984).

3.4.1 Functional Units

UMCD contains the following functional units:

- The Main Administrative Area
- Conventional Munitions Storage Area
- Chemical Agent Storage Area
- Ammunition Demolition Area
- Training Area
- Inert Storage/Warehouse Area.

3.4.2 Types of Activities

Within the six functional units at UMCD, there is a variety of activities, including:

- Chemical Agents Demolition (once the facility becomes operational)
- Maintenance and Warehousing
- Operations and Training
- Supply

- Medical
- Administration
- Housing and Community Facilities.

3.4.3 Principal Cantonments

Although there a number of miscellaneous, sometimes isolated buildings scattered across UMCD, there are only three principal cantonment areas:

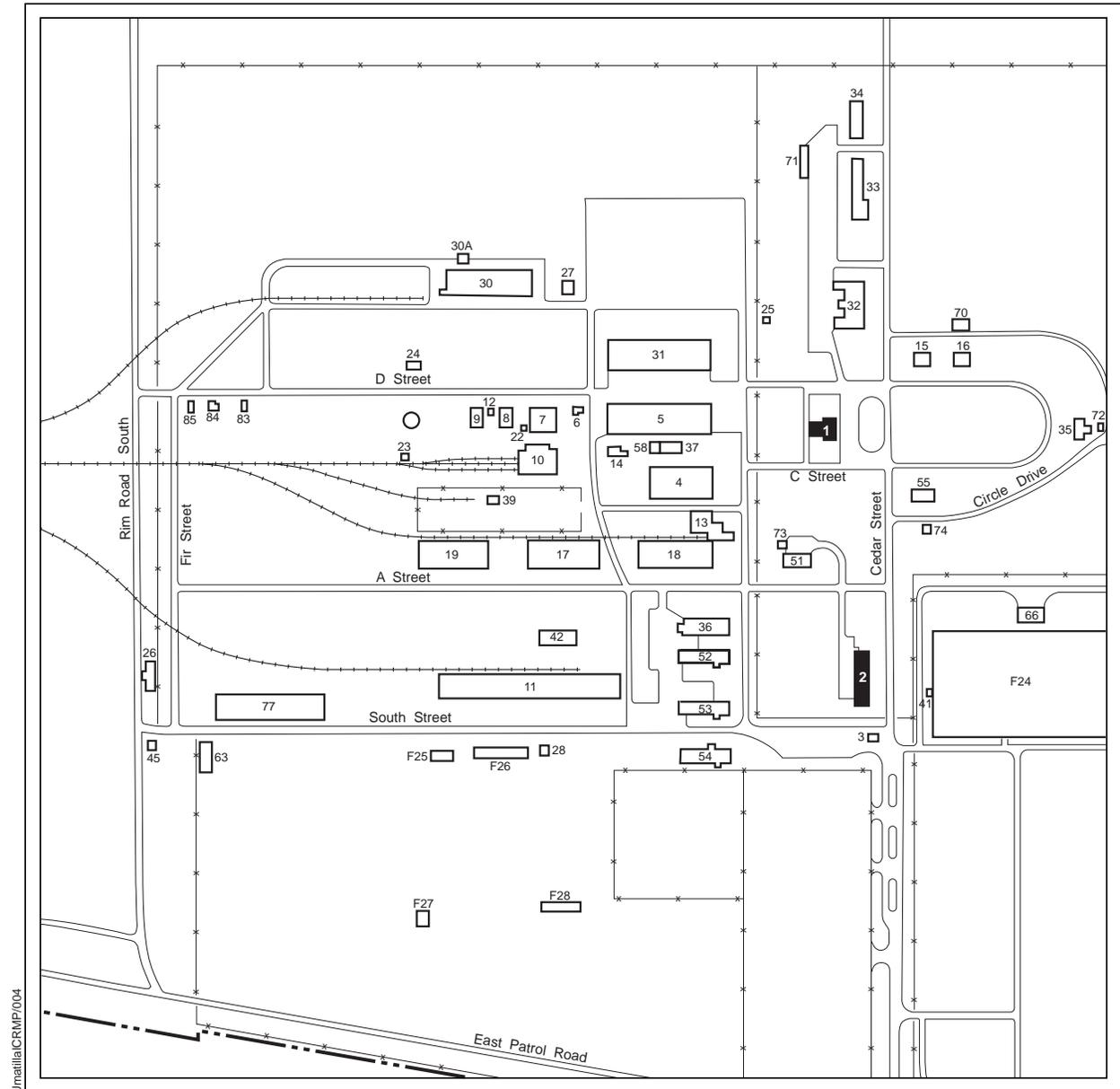
The Main Administrative Area

The main administrative area is in the southern portion of the Depot. In this area, buildings vary in size, color, and style, although a unifying pallet of materials—tan brick and red tile roofs—can be seen in some of the earlier structures. Although many of the original structures have been torn down, two distinctive two-story, tan brick structures with red tile, hipped roofs—the Headquarters Building and the Firehouse (Figure 3-1)—remain standing and are considered eligible for listing in the National Register. Building No. 1, the Headquarters Building, is the focal point of the area and is set off-axis with the main street, facing onto the parade ground. There is also a small residential enclave, in addition to administrative, maintenance, and supply facilities.

Descriptions of UMCD buildings are available in the Historic Properties Report (Building Technology 1984) and Level IV documentation associated with the report.

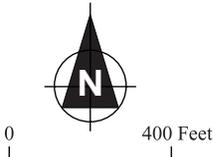
Storage Areas

1,002 igloos were laid out in parallel rows at a maximum of 100 per block, as required by standard Ordnance Department plans. Standard Army igloos of this period had arched sides designed to force an explosion upward, thereby directing explosive forces away from neighboring structures. Approximately 100 small, reinforced concrete, earth-covered, open-ended foxholes are interspersed among the igloos to provide personnel shelter in case of an explosion (Building Technology 1984).



- Depot Boundary
- Building 1 and 2 - Eligible for Listing in the National Register

Figure 3-1



Main Administrative Areas of the Umatilla Chemical Depot

Fourteen aboveground ammunition magazines (Buildings 401 through 414) were built at the south end of the ammunition storage area in 1941. Each structure contains 8-inch clay tile walls on reinforced concrete foundations with a gabled roof of corrugated asbestos. Rail lines service each of these abandoned buildings. In 1948, two new buildings were constructed in the area, Buildings 489 and 493, and a disassembly plant (Buildings 601, 602, 604, and 605) was built in 1950 at the north end of the area. Thereafter, Building 608 was built in 1955, Building 614 in 1958, and Building 206 in 1961 (Building Technology 1984).

Since 1961, with the exception of the ongoing construction on the incinerator complex, new building has been limited to small storage structures.

3.5 PALEONTOLOGY

Paleontological resources are scientifically significant fossilized remains, specimens, deposits, and other such data from prehistoric, nonhuman life. Such resources include invertebrate fossils (i.e., animals without backbones such as clams, snails, corals), plant fossils (e.g., pollen grains, plant leaves and stalks, petrified wood), and vertebrate fossils (i.e., animals with a skeleton such as fish, sharks, whales, dinosaurs) (Walker and Ward 1996).

3.5.1 Paleontological Remains at Umatilla Chemical Depot

Paleontological Environment at Umatilla Chemical Depot

Studies of the paleoenvironment of the Columbia Plateau region indicated that several major climatic changes occurred in the past 11,000 to 12,000 years, a period of time known as the Holocene. During this time frame, the Pleistocene glaciers of the Pacific Northwest retreated, yielding a transition period wherein the cold, wet, glacial climate gradually increased in warmth and dryness. The next period saw an acceleration of the warming and drying trend, with the general climate growing hotter and more arid than today. Evidence indicates that lakes were restricted or disappeared during this time. Hansen terms this period the Middle Postglacial, placing its range from 4,000 to 8,000 years ago. Comparable to this is Antevs' Altithermal, ranging from 4,500 to 7,000 years ago.

From 4,500 to 4,000 years ago to the present, Hansen and Antevs argue that the climate became cooler and moister, and the remnant lakes began to hold more water. Hansen called this period the Late Postglacial; Antevs, the midthermal. Under either name, it was a period of relatively gradual climatic changes, to the extent that the general climate had quite differing effects, depending on the local environment.

Accordingly, major flooding is known to have occurred at the end of the Pleistocene, with more normal river depositions and erosion having taken place thereafter, albeit perhaps not so far from the Columbia River as UMCD proper.

The only known paleontological find at UMCD (Boreson 1996) was identified during the construction of the Depot in 1941. A “large bone” was found during construction and was turned over to an unknown natural history society. There have been no other known paleontological finds at UMCD.

3.5.2 Protection of Paleontological Remains

Mandates for the protection of paleontological resources are few, and guidance is largely indirect. The most notable of these includes the Antiquities Act of 1906, the Historic Sites Act of 1935 (upon which the National Natural Landmarks Program is based), the AHPA of 1974, and, in the case of Army installations, AR 200-4 (see Chapter 2.0).

Any efforts to initial a UMCD regulation for the protection of archaeological resources should also include guidance regarding the collection of paleontological remains at the Depot.

3.6 UMATILLA CHEMICAL DEPOT CULTURAL LANDSCAPE

Cultural resources sites, structures, and other features constitute a significant element of the ecosystems within which they are situated—in other words, they are a part of the “cultural landscape.” DA PAM 200-4 defines a cultural landscape as:

. . . a geographic area, which includes the collective cultural, and natural resource features and the spatial relationships among those surface and subsurface features. Those natural features include the terrain, habitat areas, and topography, and the

cultural features include archaeological sites, sacred sites, historic buildings, and the modern built environment.

DA PAM 200-4 encourages the cultural landscape approach for the management of cultural resources through the preparation of ICRMPs and through analysis of the spatial relationships among cultural resources within their natural setting. The following sections describe physical characteristics that have influenced the prehistoric and historic cultural adaptations and settlement patterns in the UMCD area and offer rationale for why military landscapes develop as they do. Management of UMCD's cultural resources, utilizing the cultural landscape approach described in DA PAM 200-4, is discussed in Chapter 5.0.

3.6.1 Environmental Setting

3.6.1.1 Climate.

UMCD is heavily influenced by the air from the Pacific Ocean to the extent that the area enjoys a relatively moderate temperature. Unusual temperatures tend to occur when air from the Pacific is hindered by slow-moving, high-pressure systems over the interior of the country.

Predominating, stagnant, high-pressure systems in the north or east in the summer or early fall can result in dry and hot southerly air in the region surrounding UMCD. It is this southerly air that increases the risk of wildfires. The lowest temperatures in the winter tend to occur when high-pressure systems in central Canada force cold air down and southwesterly across the Rockies and into the Columbia Basin (Horne Engineering 1997).

UMCD, therefore, has a dry, continental climate with significant variation in temperature between summer and winter. In January, the average daily temperature is 30 degrees (°) Fahrenheit (F), and typical winters include few days with minimum temperatures below 0°F. In July, the average daily temperature is 70°F, and typical summers include few days with maximum temperatures above 100°F (Horne Engineering 1997).

The region surrounding UMCD is best described as dry, due largely to the influence of the Cascade and Coast mountain ranges west of the Depot. Once air from the Pacific Ocean contacts

the western slopes of these two mountain ranges, it naturally cools, allowing moisture to be removed as precipitation. The effect, known as a rain shadow, results in UMCD receiving only 10 inches (approximately) of annual rainfall (U.S. Army 1995). Peak precipitation occurs as snow in November, December, and January. Annual snowfall is approximately 10 inches, with the majority of this falling between the December-March window (U.S. Army 1995). Although summer precipitation is unusual, when it does occur, it is usually in the form of thunderstorms, which can sometimes cause flash flooding.

Wind in the UMCD vicinity tends to be channeled by the Columbia River system. Channeling of winds along the Columbia River Valley, in conjunction with a prevailing westerly wind direction in the area, results in a prevailing west-southwest wind at UMCD. A minor, secondary peak in wind direction can occur from east-northeast, due to drainage of cold air down the river valley during night and early morning hours (U.S. Army 1995).

3.6.1.2 *Physiography and Geology.*

Unless otherwise indicated, the information presented in Section 3.6.1.2 is taken from the *Integrated Natural Resources Plan* (Horne Engineering 1997).

UMCD is situated in the Dalles-Umatilla Basin, which is a physiographic depression in the Columbia Plateau physiographic province (Jacobs Engineering Group 1987, as cited in U.S. Army 1995). The topography slopes gently toward the Columbia River from Horse Heaven Hills in Washington and the Blue Mountains in Oregon. The Depot is on the southern side of this depression in an area known as the Umatilla Plateau and Lowlands (U.S. Army 1995).

The topography in the vicinity of UMCD is level to gently rolling and slopes northwest to the Columbia River. Elevations on the Depot range from 400 to 677 feet above MSL (Earth Tech 1995). The Depot's north-central portion is situated on a topographic high. On the eastern portion of the Depot, the terrain slopes gently southeast from the high. On the central portion, the slope is south. On the western portion, the slope is northwest.

The surface of UMCD is characterized by two distinct features. The first is the parallel, lacustrine-deposited dune lines that are oriented along a northeast axis. These dune lines have a crest-to-crest interval between 200 and 1,000 feet. Relief between dunes varies from 5 to 30 feet. Strong southwest winds are responsible for streamlining and rounding the dunes. One to several feet of loess-like material has been deposited over the original gravel surface of the area by eolian processes. Water erosion has played little part in shaping the landscape due to scant rainfall and rapid infiltration in the area. Floral communities of UMCD are significantly affected by the wind and by the solar protection offered by dunes. The northern and steeper faces of the dunes offer such protection and usually support more diverse and dense flora. Elevated dune crests are often devoid of vegetation and are subject to wind erosion (U.S. Army Corps of Engineers, Seattle District 1993).

The second distinct feature is Coyote Coulee. This is a valley that traverses UMCD along a northeast axis. The eastern edge of this valley is an escarpment that rises 60 to 90 feet at a 30-45-percent slope. The western edge of Coyote Coulee slopes at 5 to 10 percent. The Coulee directs local winds northward and upward, resulting in a tendency for blowout area (localized areas of wind erosion) formation along the toe of the escarpment (U.S. Army Corps of Engineers 1993).

Soils. Two named soil series, isolated gravel pits, and a blowout area have been mapped for UMCD (Bureau of Land Management, Soil Conservation Service [SCS] 1983, 1988, as in Horne Engineering 1997). The Quincy Series (mixed, mesic, xeric torripsamments) and the Burbank Series (sandy-skeletal, mixed, mesic, xeric torriorthents) are found throughout the Depot, with Quincy dominating the area west of Coyote Coulee and Burbank dominating the area east of Coyote Coulee. The southeast corner of the Depot is also composed of the Quincy Series. These two soil series are both deep, excessively drained soils that formed in eolian sand and gravelly alluvium and are on terraces. The surface layer and substratum of the Quincy soils are fine sand and loamy fine sand with some areas having a gravelly substratum. The surface layer of the Burbank soils is loamy fine sand, and the substratum is extremely gravelly sand (Soil Conservation Service 1988).

The nature of the Depot's storage mission does not cause extensive soil disturbance or vegetative cover destruction over wide areas; however, exposed areas at UMCD are highly susceptible to wind erosion. Areas susceptible to wind erosion include the areas around igloos, the Oregon National Guard tracked vehicle course, Coyote Coulee, and unprotected construction areas.

Water Resources. There are no permanent, naturally occurring surface water features present at UMCD due to the arid climate. With rainfall of only 10 inches per year, infiltration is rapid, and no significant runoff leaves the Depot (U.S. Army 1995).

The Columbia River is 3.3 miles north of UMCD's northern boundary (U.S. Army 1995). The river is heavily dammed, with the closest dam being McNary Dam, northeast of the Depot. The Columbia River is essential for irrigation in the area.

The Umatilla River, approximately 6 miles east of the Depot, discharges into the Columbia River. The Umatilla River is regulated by dams and reservoirs. Many diversions have been made in the river basin for agricultural purposes. Irrigation canals, which link to the Umatilla River, surround the Depot's eastern, western, and northern sides. The Umatilla River is joined by Butter Creek near the southeastern corner of UMCD.

Bodies of water near UMCD include McKay Reservoir, south of Pendleton, and Cold Springs Reservoir, northeast of Hermiston. Lost Lake is approximately 4 miles south of the Depot, northwest of Ward Butte on the Morrow-Umatilla County line.

3.6.1.3 Vegetation.

UMCD is classified as an *Artemisia-Agropyron* biome in the upper part of the Columbia Basin floristic province of northeastern Oregon. This shrub steppe habitat is one of the few remaining large, contiguous tracts in the Columbia Basin. As such, it provides valuable habitat for native plant and animal species.

The Columbia Basin Province, also known as the Umatilla Plateau, originally supported vast natural grasslands. These have been replaced by irrigated crops and, to a lesser extent, cattle raising. Of Oregon's ten recognized physiographic provinces, the Columbia Basin is one of the more man-modified ones. The availability of hydroelectric power and irrigation water has resulted in an expansion of croplands into this arid region (Puchy and Marshall 1993). UMCD currently is surrounded on all sides by intensively farmed lands supported by the use of pivot-type sprinkler irrigation systems.

Vegetative Classification. Vegetation on the Depot consists primarily of a ground cover of grasses and forbs among shrubs (antelope bitterbrush and sagebrush). The few trees present at UMCD were planted in the administrative area. In 1993, an ecological assessment of the Depot was conducted as a part of a remedial investigation/feasibility study (RI/FS) (U.S. Army Corps of Engineers 1993). This study described the plant communities and fauna and reported on species encountered during the field studies. Due to the limited time in the field (3 days in March 1992), the floral survey may not be comprehensive. Local environment, microclimatic factors, and disturbance factors have affected the distribution and occurrence of these communities. Floral communities on UMCD are significantly affected by the wind and by solar protection offered by dunes. The northern and steeper faces of the dunes offer protection and usually support more diverse and dense flora. Elevated dune crests are often devoid of vegetation and thus are subject to wind erosion (U.S. Army Corps of Engineers 1993).

According to the 1993 ecological assessment, the cover types of greatest areal extent are grasslands (*Bromus tectorum/Poa sandbergii*), long-term grassland regeneration areas, and antelope bitter brush/downy brome grass (*Brumus tectorum*). These three cover types compose 86 percent of UMCD's land area. The Depot's plant community associations support a host of fauna native to an arid biome. Table 3-1 summarizes the approximate acreage of the plant cover types at UMCD.

Grassland (*Bromus tectorum/Poa sandbergii*). Grassland cover type, comprising downy brome grass and Sandberg's bluegrass, encompasses 6,527 acres and is the major cover type. Downy brome grass is an annual or summer annual species that produces seeds that germinate in

Table 3-1. Plant Cover Type Summary for Umatilla Chemical Depot^(a)

Cover Type	Acres
Grassland (<i>Bromus tectorum</i> / <i>Poa sandbergii</i>)	6,527
Grass regeneration area	5,328
Antelope bitterbrush/downy brome grass (<i>Purshia tridentate</i> / <i>Bromus tectorum</i>)	2,791
Sagebrush/antelope bitterbrush (<i>Artemisia tridentate</i> / <i>Purshia tridentate</i>)	972
Gray and green rabbitbrush (<i>Chrysothamnus nauseosus</i> / <i>C. viscidiflorus</i>)	846
Sand dunes	124
Sagebrush/bunchgrass (<i>Artemisia tridentate</i> / <i>Agropyron spicatum</i>)	63
Needle-and-thread grass/sandberg's bluegrass (<i>Stipa spp.</i> / <i>Poa sandbergii</i>)	46
Sand blowouts	38

Note: (a) Excludes 2,583 acres comprising the Ammunition Demolition Area, paved areas, rails, buildings, and gravel pits.

Source: Horne Engineering, 1997.

late summer or early fall, allowing newly emerged plants to become established before winter. This grass is not a preferred browse species for wildlife; however, its shallow and fibrous root network is useful for erosion control.

Sandberg's bluegrass is a perennial that grows in small tufts or in tight tussocks up to 1 foot in diameter. This species is important in the western United States for grazing and has a deep, penetrating mass of coarse, fibrous roots that enable it to tolerate droughts. While Sandberg's bluegrass is not as palatable as some species found in association with it, it is consumed by grazers.

Antelope Bitterbrush/Downy Brome grass (*Purshia tridentate*/*Bromus tectorum*). This habitat is a low, serial-stage antelope bitterbrush/downy brome grass community approaching monoculture, with a high stem density. Ground cover density is low and dominated by down brome grass. Russian thistle also occurs as a ground cover in this association. Sandberg's bluegrass composes approximately 5-20 percent of the association, and Indian rice-grass and

needle-and-thread grass are exceedingly rare. Prickly pear cactus (*Opuntia polyacanth*) occurs between shrub clumps.

Sagebrush/Antelope Bitterbrush (*Artemisia tridentate*/*Purshia tridentate*). The sagebrush/antelope bitterbrush association is the most vegetatively diverse and undisturbed community found on UMCD. The overstory of this association is approximately 80 percent big sagebrush and 20 percent antelope bitterbrush. Native forbs and grasses dominate the ground cover, and Russian thistle is virtually absent. Dominant native forbs include lomatium and green sago lily, and native grasses include needle-and-thread grass and Sandberg's bluegrass. Downy brome grass is also present in this association, accounting for approximately 10 percent cover.

Gray and Green Rabbitbrush (*Chrysothamnus nauseosus*/*C. viscidiflorus*). The rabbitbrush association consists of deep-rooted, perennial, woody shrubs, which often grow in extremely dense patches. Rabbitbrush vigorously colonizes disturbed ground. At UMCD, it is dominant in areas recently burned or graded. The forage value of either rabbitbrush species is quite low, receiving light browsing on winter range sites.

Antelope Bitterbrush/Rabbitbrush (*Purshia tridentate*/*Chrysothamnus* spp.). This antelope bitterbrush and rabbitbrush association encompasses approximately 356 acres. Southern mapping units close to disturbed areas are considerably different from northern and eastern units. Southern units consist of dense, low, serial-stage antelope bitterbrush and gray rabbitbrush (*Chrysothamnus nauseosus*). Ground cover in this association is minimal because gray rabbitbrush occupies nearly all space between the antelope bitterbrush. Ground cover that does exist is dominated by downy brome grass.

Sand Dune Habitat. This feature is the windblown and sandy high points of the relict dune system that prevail over the western portion of UMCD. The sand dune habitat is dominated by ringed patches of wind-sculpted antelope bitterbrush that stand above surrounding grassland.

Sagebrush/Bunchgrass (*Artemisia tridentate*/*Agropyron spicatum*/*Poa sandbergii*). This association consists of old, large, and dense sagebrush. Shade cast by the sagebrush limits

ground cover. The groundcover present consists primarily of bunchgrasses, with bluebunch wheatgrass (*Agropyron spicatum*) being dominant. Bluebunch wheatgrass is a drought-tolerant, perennial bunchgrass with a fibrous, dense root system that lacks rootstalks. This species is one of the leading western range forage grasses, due to its high palatability and extensive distribution in eastern Oregon.

Needle-and-Thread Grass/Sandberg's Bluegrass (*Stipa* spp./*Poa sandbergii*). This grassland association is dominated by two species of the needle-and-thread grass: *Stipa comata* and *S. thurberengii*. During the 1993 field investigations, all associations of this type were found on north-facing, wind-sheltered areas. While Sandberg's bluegrass occurs in this association, downy brome grass is absent. In many areas where soil is undisturbed, it is stabilized by cushion-moss and lichens. This association may represent the natural climax grassland community in the area. Needle-and-thread grass is common on dry, gravelly, or sandy plains or mesas, and grows in an erect, leafy manner. It is deep-rooted and depends primarily on seed dispersal for reproduction.

Sand Blowouts/American Dune Grass (*Elymus mollis*). Sand blowouts are areas of severe wind erosion that range in depth from a few inches to a few feet. Soils in these areas consist of coarse sand with few fine particles. The majority of these areas are near the base of Coyote Coulee, where laminar winds become turbulent when encountering the steep slope of Coyote Coulee. In this area, local winds are directed northward and upward, resulting in a tendency for blowout area formation along the toe of the escarpment. The bottom western slope of Coyote Coulee collects eolian material that has formed newer, low-relief dunes perpendicular to the older dunes (U.S. Army Corps of Engineers 1993).

The 1993 ecological assessment reported that there had been some success with controlling blowout areas with American dune grass, a robust, coarse, perennial species. This species has an extensive root system and thick rootstocks that send up new growth.

3.6.1.4 *Wildlife.*

A qualitative assessment of wildlife at UMCD was conducted as a component of the ecological assessment for the Depot, which was prepared as part of the RI/FS (U.S. Army Corps of Engineers 1993). The field survey for the assessment was limited to a 3-day period in March 1992. With no permanent surface water on the Depot, since it is in a semiarid area, any occurrence of fish species is precluded.

Pronghorn Antelope. In the lower, driest areas of the plateau, the area in which the Depot is situated, the pronghorn antelope (*Antilocapra americana*) that were present at least into the nineteenth century are now locally extinct, with the exception of a resident herd reintroduced to UMCD in 1969 by the Oregon Department of Fish and Wildlife (ODFW) as part of a transplant program. These pronghorn obtain water from forage, and the quantity and quality of forage is the major factor in pronghorn density. A herd's daily movement varies seasonally, in response to forage availability and mating patterns. Pronghorn are herbivores that graze on grasses, various forbs, and cacti during the summer (Whitaker 1980). When fresh green vegetation is present, pronghorn drink little water, obtaining most of their water from the plants they ingest. In the winter, pronghorn browse on many different plants, favoring sagebrush (Whitaker 1980).

Coyotes are the prime predators of the pronghorn at UMCD, as Depot fences hinder their ability to escape capture. Pronghorn are unable to jump the Depot's fences, while coyotes are adept at digging under them to get at the antelope herds.

Coyote. The coyote inhabits nearly all habitat types in eastern Oregon but prefers brush areas or open plains. On UMCD, the coyote is a highly mobile predator that may be partly responsible for the lack of young pronghorn (U.S. Army Corps of Engineers 1993). In addition to pronghorns, Coyotes will consume ground squirrels, mice, rabbits, pocket gophers, reptiles, birds, insects, carrion, and fleshy fruits. They tend to either excavate their own dens or to use dens abandoned by other animals.

For a more in-depth analysis of pronghorn antelope and coyote populations on UMCD, consult the 1997 Tetra Tech *Integrated Natural Resources Management Plan*.

3.6.2 Relationship of Prehistoric Cultural Resources Sites to the Umatilla Chemical Depot Natural Environment

Although archaeological sites in the Columbia Plateau indicate that humans have inhabited the area for the past (approximately) 10,000 years, most studies of the region have focused on the resource-rich river systems, resulting in an incomplete understanding of the prehistory of the Depot area in general (National Park Service 1987). Prehistoric human populations in the area of UMCD were, of necessity, most closely associated with areas near the more bountiful riverine resources, using the upland area—such as the UMCD location—for hunting and gathering efforts only as a seasonal supplement to river food sources. Accordingly, because the Depot site is situated away from any naturally occurring water sources, especially the Columbia and Umatilla Rivers, little evidence of prehistoric human activity has been documented at the Depot.

In 1995, archaeological investigations were conducted at the Depot using a sampling strategy that excluded highly disturbed areas, restricted areas, and structures and features associated with military activities. However, with the exception of a single site in the northern portion of the Depot where isolated lithic flakes were found, results from that effort failed to find any evidence of significant prehistoric sites or activity at UMCD (Boreson 1996). Nonetheless, it should be noted that according to oral histories gathered from CTUIR elders for the Hermiston Co-Generating Project and the City of Hermiston Waterline Project, there are possible burials in the northeast corner of the Depot. While actual burial sites have never been found, it was related by the elders that any such graves would be associated with the Shoshone/Bannock Indian Wars (Boreson 1996).

3.6.3 Relationship of Historic Cultural Resources Sites to Umatilla Chemical Depot Natural Environment

Because of the sparse settlement history of the UMCD area, there are only two historic settlements—one associated with homesteading and the other with military land use. There is no verified historic settlement of the area prior to the Irrigation Agriculture Period (see Section 3.2.2.3); however, the location of old emigrant road remains crossing the Depot indicates that

pioneer settlers of the Oregon Territory traversed the area. Table 4-1 provides a list of the known historic cultural resources sites at UMCD to date. Homesteading (e.g., farming, cattle raising) and the migration patterns of the settlers following the Oregon Trail, however, left little impact on the natural environment, in comparison with military activity.

Military Landscapes. Military landscapes develop and change either abruptly (usually provoked by war, depression, or technological advances in weaponry, communications, or transportation) or incrementally (in peacetime from a desire to improve the military quality of life) (King and Peyton 1991). Rarely do military installations evolve as civilian communities, with a progression of change over time. Military landscapes are affected by five primary factors (Kreger 1985, 1988):

- ***The primary mission of the base***—Military property is generally classified into one of four functions: defense, logistics, administration, or testing/training. The continued performance of one or more of these functions is the single most important force that shapes the landscape, and each requires a unique spatial arrangement.
- ***Established military policies of social stratification***—Officers and enlisted personnel are routinely quartered in spatially separate areas and residential patterns developed along those lines.
- ***Utilitarianism***—Utilitarianism is characterized by the military’s distaste for waste. It creates uncomplicated designs and, with few exceptions, such has been the hallmark of military planning.
- ***Isolationism***—This factor relates to the need to isolate and separate installations from the surrounding community. Isolationism is enforced through the use of remote locations, fences, and controlled-access gates.
- ***Centralization***—The need to express the presence of authority is demonstrated in the built environment of military landscapes by the placement of the most powerful decision-makers at both the symbolic and usually, geographic, center of the base.

In addition, one of the primary functions of military planners and builders from the earliest years has been to provide standardized construction plans. A standardized plan is defined as one that

is used at more than one post, either as a result of a formal, organized program, or because plans have been passed back and forth in an informal manner. This planning concept existed as early as the Civil War and grew to be an established program by about 1890. From that time, a long series of designs began to appear for housing, barracks, headquarters, recreational facilities, hospitals, warehouses, chapels, and many other types of facilities commonly found on military bases. The concept also extends to designs for overall site layouts and landscaping techniques with a combined effect that has caused American military installations to develop with a uniform character that is reflected in uniform building types and layouts. Functionally, military bases are small, self-sufficient communities linked by a common goal: national defense (King and Peyton 1991).

UMCD Historical Landscape. It is readily apparent from a review of historical photographs and a recent inspection of UMCD that its development has followed the general development principles common to most military installations.

- ***The primary mission of the Depot***—Storing, preserving, and maintaining both conventional and chemical ammunition stockpiles is the primary mission that has shaped the UMCD landscape. Of the 17,054 acres within UMCD, there is only a small portion, the main administrative area, which is focused on administration, housing, and maintenance/supply.
- ***Utilitarianism***—As described in Section 3.4.4, the architecture of UMCD displays no overly complex, unique, or ornate style. For the most part, buildings are essentially utilitarian in appearance with clean, straight, unadorned lines. Some applied ornamentation is visible on Buildings Nos. 1 (Headquarters) and 2 (Firehouse), but only in association with the main entrances of those buildings, as a means of visually marking the front doors.
- ***Isolationism***—UMCD is situated in an isolated area of eastern Oregon, with the closest civilian community of any size being the Tri-Cities area, approximately 35 miles away. A few ranches and farms are scattered around its boundary.
- ***Centralization***—Because of the size of UMCD and the nature of its historic mission, the primary administrative functions of the installation are not in the geographic center of the Depot. However, Building No. 1 (Headquarters), by virtue of its siting, is the focal point

of the main administrative area and is the most readily identifiable building within that cantonment.

- **Standardized Construction.** Program “A” construction for key buildings at Army bases during the initial construction period at UMCD (prior to the material shortages caused by the onset of World War II) was characterized by the use of permanent masonry building materials (i.e., tan brick laid in a 5/1 common bond in the case of the Depot) (Building Technology 1984). Buildings Nos. 1 and 2 are 2-story, Program “A”-type structures. Other buildings that followed the Program “A” design would include the gate house (Building 3), a family quarters garage (Building 70), 2 inert storage warehouses (Buildings 17 and 18), a machine shop (Building 8), a carpenter shop (Building 7), a paint shop (Building 8), a paint storage building (Building 9), and a railroad engine building (Building 10).

The other buildings constructed in the administration area in 1942 and 1943 were temporary wood-frame structures built according to standardized Army plans (Building Technology 1984). These would include, among others, two bachelor officers’ quarters (Buildings 33 and 34), family officers’ quarters (Building 32), a cafeteria (Building 36), an inert storage warehouse (Building 19), and a carpenter shop and storage building (Building 31).

Within the ammunition storage area, virtually all igloos and the 14 aboveground ammunition magazines (Buildings 401-414) are standard Army building types (Building Technology 1984).

3.7 PREVIOUS CULTURAL RESOURCES INVESTIGATIONS

3.7.1 Prehistoric and Historic Archaeology

The following text provides a brief discussion of the prehistoric and historic archaeological investigations conducted at UMCD to date (2001). The text is not intended to be comprehensive or to detail all of the findings of each survey—that level of detail can be found within the individual survey reports cited within this chapter and listed in Chapter 9.0, nearly all of which are on file at the UMCD CRM's office.

It is not clear from agency correspondence files at UMCD whether or not the Oregon SHPO has concurred with the findings of these surveys.

U.S. Army Corps of Engineers Survey 1983. USACE, Seattle District, conducted a 10- to 11-acre field reconnaissance and limited shovel “test excavations” at the site of the proposed M55 Rocket Demilitarization project. Scattered flake tools were noted along the west rim of Coyote Coulee, probably representing hunting activities. Fifteen shovel tests (75 centimeters [cm] [2.5 feet] deep) revealed no cultural depth, and artifact density was insufficient for definition as a prehistoric site. Historic records indicate that a shepherd’s cabin was somewhere in the vicinity, but an intensive search of the area failed to locate any remains (National Park Service 1987).

Wirth Environmental Services 1987. Wirth Environmental Services prepared An Archaeological Overview and Management Plan for the UMDA as a part of the Development and Readiness Command (DARCOM) Historical/Archaeological Survey (DHAS). DHAS was an interagency technical service program designed to develop facility-specific archeological overviews and management plans. An archaeological, ethnohistoric, and historic background search was conducted. Although a 10,000-year cultural history of the area has been documented, no significant cultural resources have been recorded on the installation. No additional inventory was recommended, although archaeological clearances of specific project areas were recommended to continue.

Keo Boreson 1996. Boreson conducted an inventory of cultural resources in the excess real estate packages at UMCD for USACE, Seattle District, in 1995. Using a sampling strategy that excluded highly disturbed areas, restricted areas, and structures and features associated with military activity, 2,415 acres were surveyed, or 12.24 percent of the total UMCD facility. USACE selected 7 survey parcels containing some 468 acres in all to explore linear anomalies visible on the 1939 and 1987 aerial photographs. Further, two relatively undisturbed parcels (201 acres) adjacent to Coyote Coulee were selected for the potential of containing prehistoric remains, and 7 parcels (1,746 acres) were randomly selected. Three historic sites were identified and recorded during the inventory: two wagon roads and a scatter of debris. A road in the northern portion of the project area (Field Number 12-1) was known as the Old Emigrant Wagon Road and was in use prior to 1861. A road in the southern portion of the project area (Field Number 11-1) was in use by 1874. Site OR-UM-12 is a historic dumpsite. Additionally, two

isolated finds (a mussel shell fragment and a basalt flake) were recorded but were found to represent inconclusive evidence for prehistoric activity at the site.

3.7.2 Historic Buildings and Structures

Only two historic buildings and structures inventory has been completed for UMCD. Prepared in 1984, this inventory was one of 74 studies conducted by DARCOM. The purpose of this nationwide program was to bring the Army into compliance with the NHPA; it was initiated through an MOA between the National Park Service, the Department of the Interior, and the Army.

3.7.2.1 DARCOM Study.

In 1983, Building Technology Incorporated conducted a historic properties inventory of Army-owned properties situated within the boundary of UMCD. Objectives of the historical overview were to establish the periods of major construction at the installation; identify important events and individuals associated with specific historic properties; describe patterns and locations of historic property types; and analyze specific building and industrial technologies employed at the installation.

Based on information from the historical overview, buildings and structures were evaluated for historical significance in accordance with the criteria set forth in 36 CFR Part 60.4 and provided in guidance documents such as National Register Bulletin 15 (National Park Service 1991a). Properties were then further assessed for placement in one of five Army historic property categories as described in AR 420-40 (now superseded by AR 200-4 and DA PAM 200-4). The categories utilized were:

- Category I—properties of major importance
- Category II—properties of importance
- Category III—properties of minor importance
- Category IV—properties of little or no importance
- Category V—properties detrimental to the significance of adjacent historic properties.

Based on extensive review of the architectural, historical, and technological resources identified on Army lands nationwide (i.e., the remaining 73 DARCOM studies), four additional criteria were utilized to help determine the appropriate category level for each UMCD property. These criteria were used to assess the importance not only of properties of traditional historical interest, but of the vast number of standardized or prototypical buildings, structures, and production processes that were built and put into service during World War II, as well as of properties associated with many post-war technological achievements (regardless of building age). The four criteria were often used in combination and include (Building Technology Incorporated 1984) the following:

- Degree of importance as a work of architectural, engineering, or industrial design (e.g., workmanship, materials, functionality)
- Degree of rarity as a remaining example of a once widely used architectural, engineering, or industrial design or process (utilized with standardized construction and nonmilitary design)
- Degree of integrity of completeness (intactness).

The 1984 DARCOM Report was prepared for all the buildings within the cantonment area and several other structures on site (Building Technology Incorporated 1984). The assessment included a review of military construction between 1940 and 1945 and its contribution to the history of World War II and the post-war Army landscape. Of all the buildings at UMCD surveyed, no buildings were found to have Category I (Properties of Major Importance) or Category II (Properties of Importance) significance. Only Buildings 1 and 2 were found to be important as Category III (Properties of Minor Importance) buildings.

3.7.2.2 *Geo-Marine, Inc. 2000.*

Geo-Marine's report, *Army Ammunition and Explosives Storage in the United States, 1775-1945*, (July 2000), was compiled for the U.S. Army Corps of Engineers, Fort Worth District, and completed a national historic context for World War II-era army ammunition storage magazines (Geo-Marine 2000). The objective of the document was to present the themes and events that

influenced the construction, modification, and use of ammunition storage magazines during World War II and during the mobilization effort prior to this war. The historic context covers the evolution of ammunition storage magazines from 1775 to the present with particular attention on the growing concerns for safety after the 1926 Lake Denmark explosion and the increased need to conserve material during World War II. In addition to the context, the document also presents a classification system for all ammunition storage magazines and a discussion of National Register eligibility requirements. The study recommends that those installations with the most comprehensive array of the various magazine designs may be eligible for inclusion in the National Register, but UMCD was considered to have lesser examples of ammunition storage facilities and was considered to be not eligible for inclusion in the National Register.

However, the report does indicate that in rare instances some installations may have had such an exceptional impact on a state or locality that they could be eligible for inclusion in the National Register under other state or local themes. As of June 2001, the study, and the determinations of eligibility contained therein, had not been coordinated with the individually affected state SHPOs or concurrence received.

3.7.2.3 5-Year Projected Buildings and Structures Disposal List.

UMCD does not have a 5-year projected buildings and structures disposal list. Seventeen residential units were demolished in 1990, but there have been no demolitions since that time, and there are no present plans for further demolition.

3.7.2.4 Current Buildings and Structures Universe.

Since the 1984 DARCOM study, and the Geo-Marine 2000 magazine studies, there have been no additional studies conducted for the identification and evaluation of historic buildings and structures at UMCD. Over 90 percent of the buildings constructed at UMCD were constructed during World War II. Several storage facilities were constructed during the 1950s, but after 1960—until construction was started in 1997 on the chemical weapons disposal facility—the

only construction at the Depot has been on structures and minor storage units (see subsection 3.6.3, UMCD Historical Landscape).

3.7.3 Traditional Cultural Properties/Sacred Sites

As described in National Register Bulletin 38 (National Park Service 1991b), a TCP is a place that represents “those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally, or through practice.” Examples of TCPs include:

- A location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world
- A location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice
- A location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historical identity.

No focused studies have been undertaken at UMCD for the identification and evaluation of TCPs. However, because of the longstanding, rich, and varied Native American history associated with the area, it is possible that some TCPs are present.

As defined in EO 13007, a Native American sacred sites is “...any specific, discrete, narrowly delineated location on federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion, provided that the tribe or appropriately authorized representative of an Indian religion has informed the agency of the existence of such a site.”

EO 13007 (May 24, 1996) directs each executive branch to “(1) accommodate access to and ceremonial use of Indian sacred sites by Indian practitioners and (2) avoid adversely affecting the physical integrity of such sacred sites. Agency heads also are directed to report actions and activities related to sacred sites on their property.”

UMCD currently does not have known sacred sites on the installation, although there is the potential for them to occur. In the event of discovery, the potential burial sites associated with the historic Shoshone/Bannock Indian Wars could be considered sacred to the associated Indian tribe(s).

3.7.4 Paleontological Resources

There have been no paleontological studies undertaken at UMCD. With the exception of the single “bone” supposedly found during the 1941 construction process (Boreson 1996), no known paleontological remains have been found at UMCD.

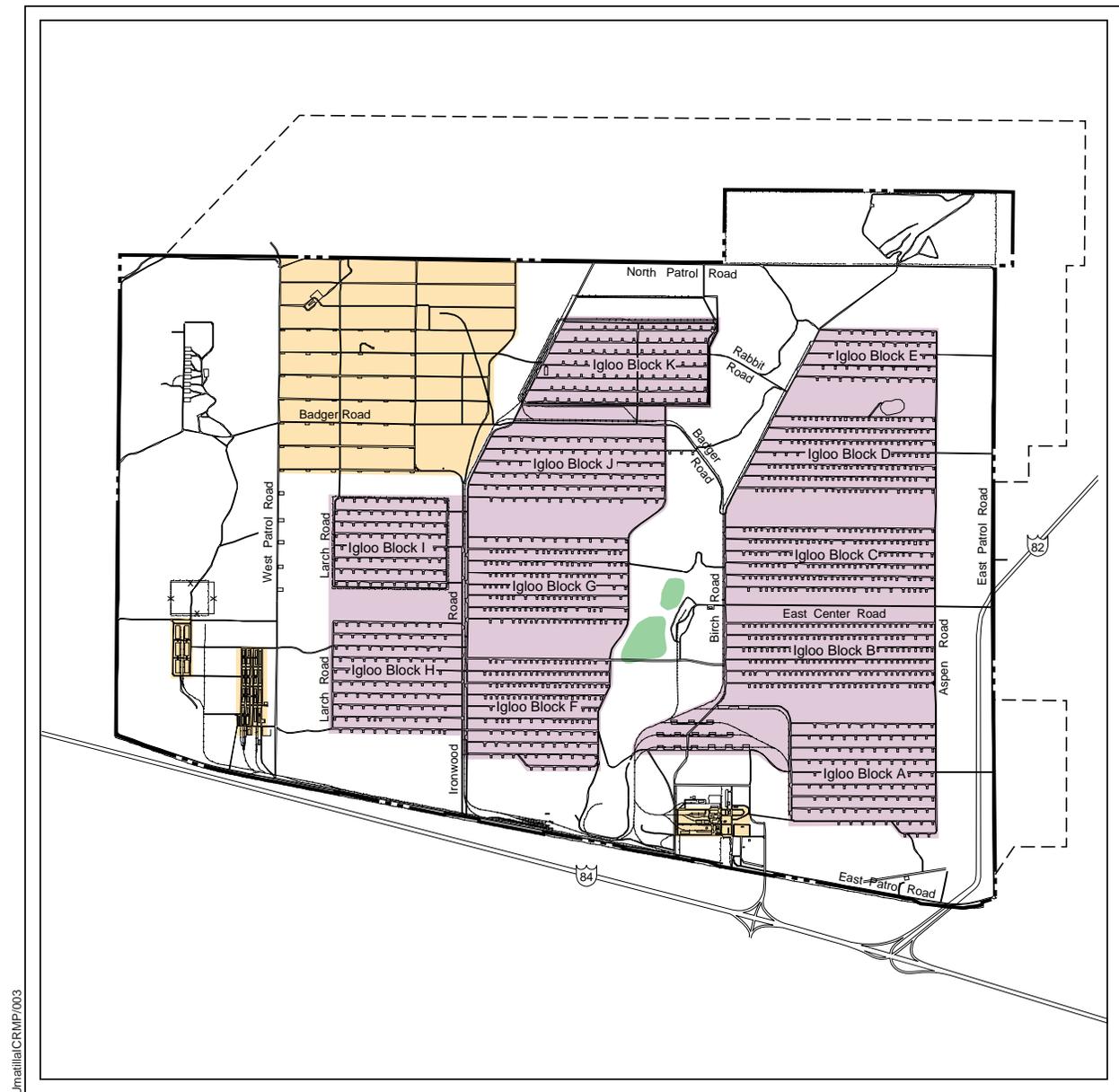
3.8 PREDICTIVE MODELS/SENSITIVITY ASSESSMENTS

3.8.1 Prehistoric and Historic Archaeology

The development of cultural resources predictive models focuses on identifying the types of resources present in a given area and then determining the relationships between resource types and easily identifiable features of the natural or cultural environment (e.g., elevation, drainage characteristics, transportation routes, vegetation) (King, Hickman, and Berg 1977). From these observations, it is possible to extrapolate to the entire area, with some degree of accuracy, where different types and numbers of sites, features, etc., will occur. Ideally, these types of observations and correlations would be based on a 100-percent survey data; however, in very large areas such as UMCD (which frequently also have physical or mission constraints [e.g., ordnance-contaminated areas]), this approach is neither feasible nor cost-effective. Therefore, predictive surveys are often employed to develop predictive models that will assist with area planning in these types of environments.

3.8.1.1 Umatilla Chemical Depot Predictive Models.

A predictive model has been developed to assist Depot staff and project planners with the identification of areas within the installation where potential archaeological sites are likely to be located (Tetra Tech 2000) (Figure 3-2). These areas have been classified into zones of low, moderate, and high potential for cultural resources based on the following research:



UmatillaICRMP/003

- Depot Boundary
- - - Restricted Easement Boundary
- Interstate Highway
- 50% Disturbed 0-3 Feet
- 75% Disturbed 3-6 Feet
- 100% Disturbed >6 Feet

Figure 3-2



Source: Tetra Tech, Inc., 2000. *Integrated Cultural Resources Plan 2000 through 2004.*

Disturbed Areas of the Umatilla Chemical Depot

- U.S. Geological Survey (USGS) quadrangle maps were examined to identify the location of water sources and other topographic features that may influence human habitation patterns. Since water is a major indicator of site presence, the lack of permanent naturally occurring surface water at the installation suggests that overall there is a low potential for archaeological sites.
- Areas of previous disturbance were identified. Disturbed areas usually preclude the presence of intact archaeological sites.
- Previous archaeological studies and surveys noted within the Property Listing Summary (PLS) for the installation were reviewed.
- According to Cleland et al. (1987), few historic archaeological sites are likely to be found within UMCD. Older prehistoric sites would tend to be along higher terraces, such as along the east side of Coyote Coulee; major floods in the past have probably destroyed early sites that might have existed at lower elevations. More recent prehistoric sites may still be situated at high or low elevations, although subject to erosion and wind forces.

The management plan contained in the report states that cultural remains may be found on the surface in deflated areas or areas covered by dunes and swales in more protected areas (Cleland et al. 1987, as cited in Tetra Tech 2000).

Low Potential Areas. Areas with low potential as archaeological sites are those that have been disturbed either through natural or manmade processes. Heavily disturbed areas within the installation have very low to no potential to retain intact archaeological sites (Tetra Tech 2000).

Little is known about historic land disturbance prior to construction of UMCD. During the nineteenth century, the site may have been occupied intermittently by miners, merchants, ranchers, and farmers, but impacts to land surface appear to have been slight and not of a permanent nature.

Twentieth-century disturbances include those from the Umatilla Irrigation Project. The West Extension Irrigation Canal was constructed in part across the northwestern corner of the Depot in 1915 and runs northeast-southwest through that area. Lateral canals may also have been

constructed inside the depot boundaries (Cleland et al. 1987). During the same period, the Oregon-Washington Railroad and Navigation Company rail line was constructed, running east-west and paralleling the southern boundary of the Depot. Train sidings were probably built within the lands currently occupied by UMCD.

A large percentage of the total land area of UMCD has been severely disturbed to soil depths of three feet or greater and thus has a low probability for the presence of intact archaeological sites (see Figure 3-2). These areas include those where igloos, administrative and support structures, and open storage areas were built during construction of UMCD. Explosive ordnance demolition activities in the western portion of the Depot and deep gravel pits dug during installation construction also disturbed any potential archaeological sites. Seven of these gravel pits were dug in Coyote Coulee.

Previous work in the region has shown that nonriverine uplands – the prevalent landscape feature within the Depot — have low potential for the presence of archaeological sites. In contrast, areas near rivers, because of their concentration of various ecological niches, containing the largest diversity of flora and fauna, are preferable for human occupation.

Moderate Potential Areas. Areas of moderate potential include the portion of UMCD along Coyote Coulee and the coulee basin. The greatest potential for undiscovered sites is most likely found on higher terraces along the eastern edge of Coyote Coulee. Research has shown that prehistoric groups preferred to live on high terraces set away from rivers, in part to avoid flooding. In the oral interviews conducted by the CTUIR, Native Americans also indicated that Coyote Coulee is ideal for driving deer or antelope herds (Boreson 1996). According to Boreson, “[the animals] would be run into a gully or coulee, and the Indians would trap and shoot them from above and from hunting blinds built on the floor of the coulee” (Boreson 1996).

The coulee floor includes numerous small depressions that contain water in the winter and are dry throughout the summer (Cleland et al. 1987). These areas may have been the site(s) of prehistoric hunting camps or blinds, although limited surveys to date have failed to identify anything more than isolated prehistoric finds. The 1996 surface survey sample identified one

isolated find near Coyote Coulee. This was a mussel shell fragment just northeast of the water tank that is west of the coulee (Boreson 1996). An earlier survey (Cooke et al. 1983) identified scattered prehistoric flake tools at the western rim of the coulee at an elevation of approximately 600 to 650 feet. The coulee itself is probably the remains of an ancient ravine created during the Spokane Flood, which occurred during the Late Pleistocene Era.

High Potential Areas. Although there is one known prehistoric site of isolated lithic flakes in the northern portion of the Depot (Cleland et al. 1987), there are very few areas of high potential for archaeological sites because of the general lack of surface water within the Depot boundaries. Areas of high potential for historic resources include the remains of the historic wagon road in the northeast part of the Depot and remains of a second wagon road running east-west along the southern boundary (Boreson 1996). Remains of both roads are slightly shallow, depressed linear features on the landscape. A portion of the first road has been identified during previous surveys (Cleland et al. 1987). Segments of the second road may have been severely disturbed by military construction activities.

3.8.1.2 Survey Exclusion Zones.

Based on previously conducted archaeological surveys and past construction activities, it is evident that certain areas of the installation are disturbed to the extent that there is little remaining potential for archaeological properties to remain (Cleland 1987). Figure 3-2 indicates areas of various degrees of disturbance. Areas considered more disturbed (more than 50 percent) include the gravel pits, the main administration area, igloo areas, and open storage areas. The Oregon SHPO's concurrence is pending.

3.8.2 Historic Buildings and Structures

In the 1984 DARCOM study (Building Technology 1984) discussed previously, two buildings—namely, Buildings Nos. 1 (Headquarters) and 2 (Firehouse)—were determined to be properties potentially eligible for inclusion in the National Register as being of local architectural significance (AR 420-40, Category III—properties of minor importance). Thereafter, however, on June 9, 1998, the Oregon SHPO advised that the Depot has been formally ruled as being

“considered eligible” for listing in the National Register as a Historical District. The effect of such ruling is that all buildings at UMCD are potentially eligible for listing until such time as they have been determined not to contribute to the historical character of the district. Moreover, UMCD has no fewer than 1,268 buildings built during World War II; since that time, with the exception of the incinerator facility now under construction, all new buildings constructed tended to be inconsequential storage-type facilities. Accordingly, until such time as an MOA defining which buildings are exempt from eligibility has been negotiated with the Oregon SHPO, the potential for historic buildings and structures at UMCD must be considered high.

3.8.3 Traditional Cultural Properties/Sacred Sites

To date, there are no predictive models or ethnographic studies for the identification, distribution, and density of TCPs at UMCD, nor have there been any predictive modeling efforts focused on prehistoric archaeological resources that have, in any way, been applied to TCPs and/or sacred sites.

3.8.4 Paleontological Resources

Predictive modeling for the general occurrence of paleontological remains across the UMCD landscape has not been undertaken.

4.0 INVENTORY OF RESOURCES

4.1 ARCHAEOLOGICAL DATABASE

Table 4-1 provides pertinent information about the few historic archaeological sites at UMCD. It is unclear as to whether or not this information has been entered into a database. No prehistoric sites have been recorded at UMCD. Rice observed a minor lithic scatter along the west rim of Coyote Coulee (Cooke et al. 1983), and thereafter, two isolated finds (a mussel shell fragment and a basalt flake) were observed during the 1996 Boreson survey, but in each instance, these observations were ruled to have revealed no cultural depth or sufficient artifact density for definition as a prehistoric site (Tetra Tech 2000).

Table 4-1. List of Cultural Resources Sites Recorded at Umatilla Chemical Depot

Field Number	Function	Age	Size	Condition	Report	National Register Eligibility
10-1 (OR-UM-16)	Dump	Historic ca. 1930- 1940	16.4 x 23.0 ft	Good	Boreson 1996	Appears ineligible; National Register Form Completed
11-1	Wagon Road	Historic ca. 1874	14 x 6,000 ft ^(a)	Disturbed	Boreson 1996	Unknown
12-1	Wagon Road	Historic ca. 1861	26 x 1,200 ft ^(a)	Disturbed	Boreson 1996	Unknown
Building #1	Administration Building	1941	NA	Good	Bldg. Tech., Inc. 1984	Unknown
Building #2	Firehouse	1941	NA	Good	Bldg. Tech., Inc. 1984	Unknown

Note: (a) Portion of site within the surveyed parcel.
ca. = circa
ft = feet
NA = not applicable
National Register = National Register of Historic Places

Source: Tetra Tech, 1997.

National Register Status. None of the three recorded archaeological sites at UMCD is listed on the National Register, and the Oregon SHPO has not ruled whether any is eligible for listing.

4.2 HISTORIC BUILDINGS AND STRUCTURES

In 1984, a Historical Properties Report was prepared for all the buildings within the Cantonment area and several other on-site structures (Building Technology, Inc. 1984). That assessment included a review of military construction between 1940 and 1945 and its contribution to the history of World War II and the post-war Army landscape. Partial NPS HABS/HAER documentation (40 inventory cards) was submitted to the HABS/HAER collections of the Library of Congress, Prints and Photographs Division, under the designation HAER No. OR-05. HABS/HAER Documentation Level IV Inventory cards and photographic negatives were completed for 52 individual properties (Building Technology, Inc. 1984).

In July 2000, the USACE, Fort Worth District, completed a national historic context for World War II-era army ammunition storage magazines entitled *Army Ammunition Explosive Storage in the United States, 1775-1945* (Geo-Marine, 2000). The objective of the document was to present the themes and events that influenced the construction, modification, and use of ammunition storage magazines during World War II and during the mobilization effort prior to this war. In addition to the context, the document also presents a classification system for all ammunition storage magazines and a discussion of National Register eligibility requirements. The study recommends that those installations with the most comprehensive array of the various magazine designs **may** be eligible for inclusion in the National Register.

UMCD was considered to have lesser examples of ammunition storage facilities and was considered to be not eligible for inclusion in the National Register. The report does indicate, however, that in rare instances, an installation may have had such an exceptional impact on a state or locality that it could be eligible for inclusion in the National Register under other state or local themes.

As of June 2001, the study, and the determinations of eligibility contained therein, had not been coordinated with the Oregon SHPO, nor had concurrence been received.

National Register Status. UMCD currently has only two buildings eligible for inclusion in the National Register, Buildings Nos. 1 (Headquarters) and 2 (Fire House); to date, neither of those buildings has been listed in the National Register.

Correspondence from the Oregon SHPO dated June 9, 1998, also indicates the Depot in general meets criterion A for its associations with national defense efforts and Criterion C for architectural merit, and is therefore “considered eligible” for inclusion in the National Register as a Historic District (see Appendix I); however, to date, consultation regarding this opinion has not been conducted. Accordingly, until such time as final concurrence has been obtained from the Oregon SHPO as to which buildings are, and which buildings are not, eligible for listing in the National Register, UMCD should proceed on the basis that not just the two individual buildings are eligible, but that the entire installation, as a Historic District, is eligible for listing in the National Register.

4.3 TRADITIONAL CULTURAL PROPERTIES/SACRED SITES

There are no TCPs at UMCD that are listed in the National Register or that are considered potentially eligible for listing. As defined in EO 13007, a Native American sacred site is “...any specific, discrete, narrowly delineated location on federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion, provided that the tribe or appropriately authorized representative of an Indian religion has informed the agency of the existence of such a site.”

EO 13007 (May 24, 1996) directs each executive branch to “(1) accommodate access to and ceremonial use of Indian sacred sites by Indian practitioners and (2) avoid adversely affecting the physical integrity of such sacred sites. Agency heads also are directed to report actions and activities related to sacred sites on their property.”

UMCD currently does not have known sacred sites on the installation, although there is the potential for them to occur. In the event of discovery, the potential burial sites associated with

the historic Shoshone/Bannock Indian Wars could be considered sacred to the associated Indian tribe(s).

4.4 PALEONTOLOGY

Currently, UMCD has no identified significant paleontological sites.

4.5 PLANS AND SCHEDULES FOR RESOURCE INVENTORIES

To date, resource inventories for all classes of cultural resources at UMCD have been conducted either in response to new or changing installation missions (e.g., construction of a new facility) or as funding has allowed.

A study of the Oregon Trail (including parts of UMCD) is being conducted by the BLM, and a cold war-era inventory study was funded in fiscal year (FY) 2000, but to date it has not been concluded. Other resource inventories are expected to be conducted on the same basis as past studies; however, priorities set by the goals of this ICRMP may affect priorities and/or funding requests.

4.6 UNDERTAKINGS WITH THE POTENTIAL TO AFFECT CULTURAL RESOURCES—5-YEAR PROJECTION

The nature of the principal mission of UMCD is static and creates little potential for ground disturbance to affect cultural resources. In addition, because of the BRAC status of UMCD, there is no 5-year projection for projects at the Depot.

5.0 MANAGEMENT PLAN

5.1 OVERVIEW

This portion of the ICRMP describes the objectives, priorities, staffing, policies, and methods that will be relied upon and utilized to accomplish the legal compliance requirements for the management of cultural resources on UMCD. The cultural landscape management approach offers significant management advantages for an integrated management plan (e.g., spatial analyses of project-driven field inventories within specific project boundaries, utilizing the cultural approach, can predict potential cultural resources locations demonstrating inter-relationships that exist among known cultural and natural resources, and document past military impacts to the area). Likewise, cultural resources on the installation will be managed within an installation-wide framework of interrelated landscape components brought together through Geographic Information System (GIS) data layers of cultural, natural, and human-related information, rather than existing as a single, unassociated entity.

5.2 CULTURAL LANDSCAPE MANAGEMENT APPROACH

A cultural landscape planning approach is specifically explained in Chapter 2 of DA Pamphlet 200-4, Cultural Resources Management. For the purpose of this document's clarity, however, the following information is provided, some of which is discussed in subsection 3.6 of this document. The cultural landscape approach provides the overall framework for the ICRMP and future implementation of project-specific compliance actions. This ICRMP serves as the platform to operationalize the cultural landscape concept.

Cultural resources constitute essential and significant elements of ecosystems in which Army installations and their component activities exist and function. Planning and management of cultural resources, therefore, should occur within the context of a comprehensive and integrated land, resource, and infrastructure approach that adapts and applies principles of ecosystem management. This involves planning and management of cultural resources by reference to the landscape (i.e., the "Cultural Landscapes Planning Approach"). Principal components of this management approach are as follows:

- The cultural landscape planning approach defines a “cultural landscape” as a geographic area that includes the collective cultural and natural resources features and the spatial relationships among those surface and subsurface features. Examples of natural features include terrain, habitat areas, and topography. Cultural features include archaeological sites, sacred sites, historic buildings, and the modern built environment. All of these natural and manmade features, including those related to military operations, are viewed as a series of surface and subsurface features that make up the installation’s cultural landscape.
- The cultural landscape planning approach focuses on the analysis of the spatial relationships among natural and man-made landscape features. Cultural and natural resources distribution maps can provide the data for systematic analysis of spatial patterning and land use through time. Factors such as elevation, slope, soil texture and drainage, vegetative cover, distance to water and proximity to roads, other transportation routes, and service centers have resulted in nonrandom patterns of human land use through time. These factors influenced the locations selected for prehistoric and historic settlement and activity areas.
- Distribution maps of cultural and natural resources locations, overlain with specific locations of military testing and training areas (including past, present, and, to the extent possible, future activities) will show a nonrandom pattern of distribution across the landscape. Spatial analyses based on such distributions can indicate if the locations of cultural resources, natural resources, and military training and infrastructure improvement activities coincide. The coinciding distribution of cultural and natural resources and specific locations of military activities are important land management factors.
- Identification of the nonrandom patterns of land use is beneficial for compliance-related environmental documentation that requires future impact prediction (e.g., NEPA and NHPA documents). It is beneficial for the preparation of analyses for the consideration of alternatives, for impact avoidance, and in the development of training scenarios in a manner that avoids conflict with sensitive resources. Section 3.6 discusses the relationship of prehistoric, historic, and military resources to the natural environment of UMCD. This type of specific spatial information allows predictive scenarios that aid in the management of the resources, and adds a timeliness to compliance activities and the completion of mission objectives.

- The cultural landscape planning approach identifies military installations as an integral part of the landscape and attempts to identify interrelationships between the natural and cultural elements. This is accomplished by utilizing GIS systems and multiple data layers to fully integrate ongoing installation efforts in cultural and natural resources with the military mission.
- The cultural landscape approach emphasizes the fact that installation natural and cultural resources may result from and obtain significance through the continuous military occupation and use of the land. The cultural landscape on UMCD is unique because of its continued use for defense-related purposes and the influences to the landscape that result from these activities.
- The cultural landscape planning approach is most useful as an overall conservation planning strategy fully integrating cultural and natural resources and the military mission.

Cultural landscape as a planning approach should not be confused with “historic landscapes.” Historic landscapes are a type of historic property as defined in the NHPA. Historic military landscapes are architecturally designed landscapes associated with historic building districts in U.S. Army cantonment areas and are part of the larger cultural landscape.

The value of the cultural landscape approach to cultural resources evaluation and treatment is that a resource’s significance is not determined in isolation but within the entire context of the landscape and interrelationships among its components. The cultural landscape approach allows greater flexibility in environmental impact analysis and the development of mitigative strategies in terms of trade-offs that can be negotiated when the linkages between cultural and natural resources are identified. The approach also allows for more informed and defensible decision-making.

5.3 GENERAL OBJECTIVES

The basic objective of this ICRMP is to integrate the legal requirement for historic preservation with the planning and accomplishment of military training, construction, and other mission-essential activities, as well as real property and land use decisions at UMCD. Specific objectives of this ICRMP are discussed in the following subsections.

5.3.1 Compliance with Federal Preservation Law

UMCD complies with all laws and regulations pertaining to the identification, management, and preservation of cultural resources. Chapter 2.0 of this document summarizes the federal statutes, regulations, EOs, and memoranda applicable to the management of cultural resources and the cultural resources management program on UMCD.

5.3.2 Location, Evaluation, and Protection of Archaeological, Historical, and Sacred Sites

In order to comply with those laws and regulations noted in Chapter 2.0, the CRM must locate, evaluate, and protect historic properties and sacred sites on UMCD. The CRM gives priority to the evaluation of archaeological sites situated in training and proposed construction areas, and to the development of protective strategies or mitigative measures for those sites eligible for nomination to the National Register, if any. The CRM must first determine if the proposed action is an undertaking and then determine the area of potential effect (APE) (see Standard Operating Procedure [SOP] #1). The CRM must then apply the criteria of effect and adverse effect to determine whether Army undertakings at UMCD will affect historic properties.

Planning such projects may proceed, with the understanding that changes in design or delays may occur where mitigation must be applied as a result of consultation. The Cultural Resources Manager must consult in a timely manner with the Oregon SHPO concerning all undertakings that have the potential to affect historic properties not otherwise excluded by a PA or an MOA (if such agreements are in place).

5.3.3 Contribution to the Body of Knowledge

Valuable contributions to the regional cultural resources data can be achieved through the analysis and synthesis of data collected on UMCD. The dissemination of information on areas that heretofore may not have been included in the regional contexts adds to the richness and viability of that data.

5.3.4 Efficient Management Techniques

It is incumbent upon the CRM to conserve funds through the employment of more efficient management techniques and the initiation of mission-oriented evaluation procedures for archaeological sites and other cultural resources properties. The practicalities of accomplishing

this at UMCD will require the CRM to be creative in the use of funds and time. The possibility of utilizing and integrating information and technologies from other offices and databases on the installation should be explored.

5.4 ROLES AND RESPONSIBILITIES

5.4.1 Installation Commander Responsibilities

The installation Commander's responsibilities are summarized in AR 200-4. The Commander:

- Is responsible for establishing a cultural resources management program by means of this ICRMP.
- Designates, as appropriate, a CRM to coordinate the installation's cultural resources management program.
- Establishes government-to-government relationships with federally recognized Native American tribes. If there is the potential for significant Native American issues at UMCD, the Commander should also designate an Installation Liaison for Native American Issues.
- Establishes a process that requires installation staff elements, tenants, and other interested parties to coordinate with the CRM early in the planning of projects and activities to determine if any cultural resources are, or may be, present that could be directly or indirectly affected by a project or activity. These elements include training activities, master planning, environmental impact analysis, and natural resources and endangered species management planning and programming, including INRMPs.
- Establishes funding priorities and program funds for cultural resources compliance and incorporates them into the Environmental Program Requirements (EPR) report.
- Serves as the "Agency Official," as defined in 36 CFR Part 800, with responsibility for installation compliance with the NHPA.
- Serves as the "Federal Agency Official," as defined in 43 CFR Part 10, with responsibility for installation compliance with the NAGPRA.
- Serves as the "Federal Land Manager," as defined in 32 CFR Part 229, with responsibility for installation compliance with the ARPA.

- Serves as the “Federal Agency Official,” as defined in 36 CFR Part 79, with management authority over archaeological collections and associated records.
- Signs all NHPA PAs, MOAs, and NAGPRA CAs and Plans of Action after Major Command (MACOM) and HQDA comments have been addressed and prepares National Register nominations for historic properties.

5.4.2 Cultural Resources Manager Responsibilities (acting for the UMCD Commander)

The CRM performs the following tasks:

- Reviews all projects (e.g., MCA, job order contracts, training exercises) and DA 1391 (Military Construction Project Data) forms and determines the type and level of impact to cultural resources.
- Prepares and implements, if appropriate, an installation-wide NHPA Section 106 PA in accordance with 36 CFR Part 800 to address and streamline NHPA compliance procedures for ongoing missions and operations activities that are “undertakings,” as defined in the NHPA. If a UMCD-wide NHPA Section 106 PA is not appropriate, the CRM, acting for the Commander, must ensure that NHPA Section 106 compliance procedures are followed for each undertaking. Those compliance procedures are outlined in 36 CFR Part 800, “Protection of Historic Properties,” the implementing regulations for the NHPA.
- Is designated as the Installation Liaison for Native American Issues. There have been no human remains or other NAGPRA-related items found on UMCD as of yet. However, if NAGPRA issues become relevant, the CRM, acting for the Commander, will prepare and implement an installation-wide NAGPRA CA.
- Determines the applicable laws and regulations and the applicable SOP (contained in this ICRMP), other applicable consultation or regulatory requirements, or if the undertaking is considered under the PA developed for NHPA compliance.
- Participates in consultation as provided in the ICRMP or otherwise specified by appropriate laws and regulations, and conducts and reviews appropriate studies, as necessary.
- Serves as the UMCD point of contact for Native American consultation, the Council, as applicable, and the Oregon SHPO.

- Coordinates cultural resources management activities with organizational elements, tenants, and other parties identified by the UMCD Commanding Officer.
- Coordinates and signs digging permits on the installation.
- Has responsibilities for record keeping and curation by:
 - Developing and maintaining records, reports, and documentation sufficient for consultation and an assessment of cultural resources for their eligibility for inclusion in the National Register (including maps, plans, notes, data forms, records, photographs, memoranda, journal notes, Job Order Requests [JORs], and draft and final reports).
 - Providing for curation of any artifacts recovered from UMCD, in accordance with 36 CFR Part 79 (*Curation of Federally Owned and Administered Archaeological Collections*).
- Other administrative responsibilities include:
 - Assisting the Commander with development of funding priorities for all cultural resources program and compliance activities.
 - Developing budget requirements for compliance with this ICRMP and any PAs and/or MOAs, using the A106 budgeting process to program these requirements through Army channels.
 - Ensuring that the current ICRMP is operational at all times and that all procedures of the ICRMP and stipulations of applicable PAs and/or MOAs are implemented, as required by AR 200-4.

5.5 INTERNAL COORDINATION PROCESS

Required coordination and consultations that may affect the missions at UMCD must be identified as a priority and addressed early to avoid impacts to readiness. The Department of Public Works (DPW) holds “scheduling meetings” on a weekly basis. The CRM attends those meetings that include discussion and scheduling of any project conducted on the installation. Coordination of these projects involves the CRM and “clearance” of the work. If the project

cannot be cleared, the requesting entity is notified of the appropriately scheduled compliance activity required before the project can commence.

Through the weekly scheduling meetings, the CRM ensures that any activity or undertaking that may have a component of ground disturbance or building alteration is coordinated with other installation activities, including, but not limited to, the following entities.

5.5.1 Umatilla Chemical Depot Commander

All Section 106 actions require consultation and coordination with the Oregon SHPO; others may require coordination with the MACOM and HQDA. In preparing any final PAs and MOAs, the UMCD Commander (and the CRM designate) will work cooperatively to address all MACOM and HQDA comments on draft agreements. Following integration of MACOM and HQDA comments, the UMCD Commander will sign the agreement, obtain signature of SHPO, MACOM (as appropriate), and any consulting party, and forward the document to the Council, if applicable, for signature.

5.5.2 Base Civil Engineer/Public Works/Master Planning

Because of the Depot's BRAC status, there is no Master Plan presently in place for UMCD. In addition, there are no plans to upgrade existing facilities or construct new ones above and beyond the ongoing construction of the chemical agents demolition facility. There are also no 1391s in place for any type of construction over the next 5 years. Should this situation change, the planning stages of any proposed undertakings should include inventory and assessment of cultural resources in order to allow project viability to be assessed and to meet compliance requirements under NHPA Section 106 and the NEPA.

This coordination process would allow for review of any ground-disturbing action carried out by UMCD units or its tenants or contractors. The Base Civil Engineer and/or DPW Directorate/ Master Planning would act as a conduit for all activities and/or actions requiring NHPA Section 106 compliance.

There are only two known buildings eligible for listing in the National Register (Buildings Nos. 1 and 2); however, the SHPO has indicated that the entirety of UMCD may be eligible as a Historic District. Therefore, the stipulations of 36 CFR Part 800 should be met for any project with the potential to affect buildings and structures at the Depot by coordinating with the Oregon SHPO.

5.5.3 Industrial Risk Management Directorate, Environmental Office

Coordination and review of projects within this division is imperative as all aspects of the environment involve a cultural landscape planning approach. This is most useful as an overall conservation planning strategy fully integrating cultural and natural resources and the military mission.

5.5.4 Security Police

The CRM should work with the UMCD security officials to insure that ARPA violations do not occur. If necessary, SOPs should be developed to assist with historic properties protection. In accordance with AR 200-4, 2-6, UMCD security personnel, UMCD legal staff, Public Affairs Office (PAO), recreation management, and other environmental staff are required to be informed about cultural resources laws and their enforcement under the ARPA. Any coordination regarding these issues should be routed through the CRM.

5.5.5 Tenant Organizations under the Resource Management Office

The Resource Management Office is responsible for the financial management and accounting for the installation's funds. Cultural resources funds will be tracked, and the Resources Management Office will serve as a source of information on funding. There are six government tenants at UMCD:

- Oregon Army National Guard
- PMCSD
- USACE (Seattle and Huntsville Districts)
- SAIC, which is the PMCSD support contractor
- The Health Clinic detachment from Madigan Army Hospital
- Washington Demilitarization Company.

Leased parcels at UMCD are relatively small, and the lessee is responsible for maintaining the land and keeping it free of debris and contamination. If the lessee wants to build new structures or add to existing ones, the lessee must contact UMCD, obtain a digging permit, and clear the activity through the Environmental Office, including the CRM.

Most UMCD tenants do not formally lease the land they utilize; they have Interservice Support Agreements (ISA) with UMCD. Like leased parcels, tenant-utilized parcels are managed by UMCD, including any environmental issues that may arise. Coordination and “clearance” of any ground-disturbing activities or building modifications must be staffed through the CRM as part of the process.

5.5.6 Public Affairs

UMCD does not currently have an abundance of verified historic resources; however, the Depot has not been completely surveyed for archaeological or traditional resources, and the Oregon SHPO has indicated the potential for additional historic buildings and structures. As such, the PAO should be kept abreast of these issues, and the UMCD CRM should continue to educate Depot personnel about historic preservation issues. Coordination with the PAO can aid historic preservation issues. The PAO can help locate historic information concerning sites or activities and can often assist in developing interpretive programs. As appropriate, the PAO can also assist in promoting the ICRMP to the public and the installation.

5.5.7 Judge Advocate

If needed at sometime in the future, the coordination of agreement documents such as MOAs, PAs, and NAGPRA CAs should be staffed through the UMCD Judge Advocate's (JA's) office for review and comment in accordance with the procedures and time frames in AR 200-4. The JA should comment as to the correctness of the documents as they become legally binding agreements under the law for which the UMCD Installation Commander is responsible. The JA serves as counsel for UMCD in appropriate administrative cases, hearings, and enforcement actions. The JA may also interpret various laws and regulations related to cultural resources management.

5.6 EXTERNAL COORDINATION PROCEDURES

The key to the successful balance of mission requirements and cultural resources compliance and management responsibilities is early planning and coordination to prevent conflicts between the mission and the resources.

5.6.1 Major Command

Any Section 106 actions requiring PAs or MOAs should be prepared by the UMCD CRM and staffed for review through the Depot Commander MACOM, and as appropriate, to the Army Environmental Center (AEC) and HQDA. The UMCD CRM shall ensure that PAs or MOAs reflect and embody the results of the consultation efforts by UMCD, the Oregon SHPO, and, when appropriate, the Council. The MACOM will provide a technical and legal review as appropriate.

5.6.2 Headquarters Department of the Army

In accordance with AR 200-4, HQDA (AEC) will provide technical review and will coordinate with The Judge Advocate General (TJAG) to obtain legal review. AEC will provide the MACOM and UMCD Commander with technical and legal reviews. (The CRM should consult AR 200-4, Chapter 3-1a(5) for accompanying documentation for PAs or MOAs.) If the PA or MOA has Army-wide implications, the MACOM or HQDA may elect to be a participant in and an Army signatory to such an agreement. Otherwise, the UMCD Commander has signature authority for NHPA PAs, MOAs pertaining to Army-owned and -controlled federal properties, or actions subject to Army federal approval that fall within the UMCD Commander's area of responsibility.

5.6.3 Oregon State Historic Preservation Officer

The SHPO coordinates state participation in implementation of the NHPA and is a key participant in the Section 106 process. The role of the SHPO is to consult with and assist UMCD when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or reduce those effects. The SHPO reflects the interests of Oregon and its citizens in the preservation of their cultural heritage and helps UMCD identify those persons interested in an undertaking and its effects upon historic properties. When the SHPO does not respond within

30 days of receipt of a written request for a review of a finding or determination, UMCD may either proceed to the next step in the process based on the finding or determination or consult with the Council, in lieu of the SHPO. All “undertakings” at UMCD that fall under Section 106 must be coordinated with the SHPO or have a PA or MOA in place that allows for agreed-upon procedures in place of normal Section 106 compliance.

5.6.4 Advisory Council on Historic Preservation

The Council may participate in the Section 106 consultation process, if invited, or if comments are requested from any consulting party. Upon receipt of such a request, the Council has 15 days in which to respond as to whether it will participate, and if it does so, it has 45 days to provide comment. Additionally, copies of all agreements are to be provided to the Council. The Western Office of Review is in Lakewood, Colorado, and is the regional office of the Council with whom UMCD interacts.

5.6.5 Affected Native American Groups

UMCD, the SHPO, and the Council should be sensitive to the special concerns of Native American tribes in historic preservation issues, which often extend beyond Native American lands to other historic properties. When an undertaking will affect traditional or historical territories of Native American tribes, UMCD shall invite the governing body of the responsible tribe(s) to be a consulting party and to concur in any agreement. When a Native American tribe has established formal procedures relating to historic preservation, UMCD, the SHPO, and Council, as appropriate, shall, to the extent feasible, carry out responsibilities under those regulations consistent with such procedures. A Native American tribe may participate in activities under these regulations in lieu of the SHPO with respect to undertakings affecting its lands, provided the Native American tribe so requests, the SHPO concurs, and the Council finds that the Native American tribe's procedures meet the purposes of these regulations. When an undertaking may affect properties of historic value to a nonfederally recognized Native American tribe on nonnative American lands, the consulting parties shall afford such tribe the opportunity to participate as interested persons. Traditional cultural leaders and other Native Americans are considered to be interested persons with respect to undertakings that may affect

historic properties of significance to such persons. Chapter 7.0 of this document discusses Native American consultation processes.

5.6.6 Public Involvement

UMCD should take into account the views of the public on historic preservation questions and encourage maximum public participation in the Section 106 process. UMCD, in the manner described below, and the SHPO should seek and consider the views of the public when taking steps to identify historic properties, evaluate effects, and develop alternatives. Public participation in the Section 106 process may be fully coordinated with, and satisfied by, public participation programs carried out by UMCD under the authority of the NEPA and other pertinent statutes. Notice to the public under these statutes should adequately inform the public of preservation issues in order to elicit public views on such issues that can then be considered and resolved, when possible, in decision-making. Members of the public with interests in an undertaking and its effects on historic properties should be given reasonable opportunity to have an active role in the Section 106 process. The January 2001 revisions to 36 CFR Part 800 modified the Section 106 process; however, verified guidance has not yet been prepared. Appendix J offers useful guidance regarding these issues that is based on the previous Section 106 guidelines (see Chapter 8.0 of this ICRMP).

5.7 GUIDELINES FOR INVENTORIES/EVALUATIONS

Although the likelihood of finding intact archaeological sites is low, undiscovered (i.e., buried) archaeological sites may exist within the installation, and additional surveys may be necessary for projects that will create soil disturbance or potentially affect historic properties. Additional consultation and research may also be necessary prior to project initiation to identify areas or objects of significance to federally listed Native American tribes or groups.

Depot planners and project proponents should consult with the CRM early in the planning process to avoid delays and to facilitate compliance with applicable laws and regulations contained within the accompanying SOPs. General steps, described in SOPs No. 1-2, to be taken for all Depot activities that may affect cultural resources include:

- Identification of the area or structure to be affected through coordination with the CRM
- Use of existing maps and inventory lists to examine the project area for the presence of existing or potential archaeological sites and standing structures
- Contact with the Oregon SHPO to determine further action necessary to comply with the NHPA (Section 106) and the ARPA.

Depot planners should be advised that completion of these steps may require considerable time and budgetary resources, particularly if the SHPO requests completion of a Phase I archaeological survey, including background research and archaeological excavations or surface surveys. Further excavation work (Phase II and/or Phase III) may also be required by the Oregon SHPO if archaeological resources potentially eligible for the National Register are found during the Phase I survey. If historic structures are involved, any proposed modifications or demolition must be approved by the Oregon SHPO, and mitigation efforts may be required. Hence, it is critical that cultural resources management implications be considered in the initial stages of a proposed undertaking or project and that input from the CRM be sought in all stages of project planning.

5.8 PRESERVATION/PROTECTION PLAN (including site nondisclosure information)

UMCD must protect significant (National Register-eligible) sites or buildings using avoidance, physical protection, data recovery, or other mitigation procedures, and must regularly review the adequacy of such preservation/protection measures. There are several useful documents that deal with site protection/preservation. Two of those are the *Department of the Interior: Archaeology And Historic Preservation: Secretary Of The Interior's Standards And Guidelines and Treatment of Archaeological Properties, A Handbook*. These basic documents deal with almost every aspect of preservation activities and offer standards and guidelines for each. All archaeological resources must be protected until they are evaluated for National Register eligibility by a professional archaeologist and this evaluation is reviewed by the Oregon SHPO. Also, it should not be forgotten that the SHPO, in the absence of an MOA or PA, should be consulted in the plan chosen for preservation/protection or other site treatment. Four treatment plans for the protection of prehistoric and historic sites follow.

5.8.1 Prehistoric and Historic Archaeological Sites

There are currently no verified National Register-eligible archaeological sites at UMCD.

However, the following guidance is provided to assist cultural resources management personnel in the event that these types of properties are identified during the 5-year period of this ICRMP.

- **Avoidance of all areas having significant sites.** In the majority of cases, the most effective and cost-effective way to protect National Register-eligible sites is through avoidance. Coordination of mission activity planning and cultural resources management, particularly in the early stages of planning, can determine if significant sites exist in the APE and, if so, where to move or adjust the APE boundaries so that historic properties are avoided. The CRM may determine that large blocks of land need to be avoided entirely or if specific, small locations can simply be bypassed.
- **Physical protection of individual sites by fencing, berming, or taking protective measures for making them inaccessible.** In some cases, it may be necessary to protect the site by placing temporary fencing or berming around site boundaries; marking site boundaries with fluorescent flagging often accomplishes the same goal. This procedure, in combination with written, graphic, and verbal instructions for site avoidance, provides adequate physical protection of archaeological sites.
- **Monitoring the effectiveness of protection measures.** The requirements of an undertaking and the needs for site protection often become relatively complex, and avoidance of historic properties, even with the assistance of physical barriers, is difficult. In-field monitoring of these situations is an effective technique for completing mission objectives and protecting archaeological sites. Monitoring also includes visiting properties periodically to determine if avoidance, physical barriers, or both are helping to maintain site integrity.
- **Protection of a statistically valid sample of the different classes of significant sites.** AR 200-4 states that these classes will include “sites that show the chronological, functional, and cultural variability in the properties characteristic of the installation and the region. Members of the sample will be located where they can be avoided by installation activities or protected in other ways. The sample will be updated periodically as new data permit.” Critical to this treatment is the implementation of a sample survey to define classes of sites within different environmental types and then to determine which ones are significant. Presently, the UMCD area has not been adequately sampled;

consequently, it is very unlikely that the recorded sites represent the entire range of variation within the installation.

When protection of a resource is impossible, data recovery should be conducted to compensate for the site's loss of integrity and information potential. Accordingly, the data recovery program should be structured to retrieve a representative sample of the information that justified the site's significance and National Register status. Moreover, it should meet federal standards pertinent to documentation and excavation (36 CFR Part 66; 48FR44734-44737). Close coordination with the SHPO is a must at this stage of preservation activities.

- Data recovery projects will be actively directed by a professional archaeologist who meets the Secretary's qualifications for archaeology (Appendix F).
- A data recovery plan will be prepared for each mitigation project. The plan will describe the significance of each investigated site to the archaeological record of the Deschutes-Umatilla Plateau or surrounding region. It will justify that significance by relating the kinds of information present at the site to the specific questions that the recovered information can address. With respect to field investigations, the plan will thoroughly discuss the kinds of data recovery techniques employed and the specific information those techniques are designed to recover; it will also indicate and justify the use of various techniques at different locations within the site.
- Although data recovery projects will be problem-oriented, investigation should also seek to obtain a reasonable amount of information that may be useful for addressing other questions or problems in the future. In sum, data recovery should attempt to recover a wide range of data.
- To adapt to unforeseen problems, discoveries, and opportunities, data recovery projects will be designed with flexibility in mind.

5.8.2 Buildings and Structures

UMCD has two buildings identified as eligible for listing in the National Register (Buildings Nos. 1 and 2). The Oregon SHPO has indicated that the Depot itself is considered "eligible" as a Historic District. Accordingly, an up-to-date historic building survey (as well as periodic re-

evaluation of buildings and structures) should be undertaken in order to be in full compliance with current federal laws and regulations.

A preservation/protection plan is provided here for Buildings Nos. 1 and 2, and for any additional buildings and structures identified in the future. Protection/treatment alternatives for historic buildings and structures include maintenance, preservation, rehabilitation, and documentation. Note that SOP #9 sets out procedures for dealing with historic buildings and structures, and Appendix K provides information regarding World War II temporary buildings. The first three definitions, along with the four listed hereafter, are relevant to preservation and protection (see 48FR4479-44740).

- **Maintenance:** The act or process of preventing deterioration through regular cleaning, servicing, replacement of worn or deteriorated materials, and minor repair without altering the building's essential character or form.
- **Mothballing:** The act or process of removing a building from active use and protecting it from deterioration.
- **Preservation:** The act or process of applying measures to sustain the existing form, integrity, and material of a building or structure and its site features. It may include initial stabilization as well as ongoing maintenance of the historic building materials.
- **Rehabilitation:** The act or process of returning a property to a state of utility through repair or alteration that makes efficient contemporary use possible while preserving those portions or features of the property that are significant to its historical, architectural, and cultural values.
- **Repair:** The act or process of fixing a building element that is broken or deteriorated while retaining the building's essential character and form.
- **Restoration:** The act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular time by means of removal or later work or by replacement of missing earlier work.

- **Stabilization:** The act or process of applying measures to reestablish a weather-resistant enclosure and the structural stability of an unsafe or deteriorated property while maintaining the present essential form of the building.

If a UMCD undertaking will have an adverse effect on one of its National Register buildings, such that the effects cannot be mitigated via maintenance, repair, restoration, avoidance, or other means, the adverse effects will be mitigated through documentation. Documentation compiles measured drawings, photographs, histories, inventory cards, or other media that depict the property. Standards for documentation will follow the Secretary's *Standards and Guidelines* for architectural and engineering documentation (48FR44730-44734). Accordingly, documentation for mitigation will:

- Be conducted by an architectural historian or historic architect who meets the requirement of AR 200-4 and who is supported by the appropriate personnel and equipment
- Adequately explicate and illustrate what is significant or valuable about the historic site, structure, or object being documented
- Use the appropriate level of documentation (i.e., Levels I-IV), depending on the type of impact and the significance of the resource.

Note: As part of the 1984 DARCOM survey, HAER Level IV inventory forms were completed for 40 individual properties on UMCD and submitted to the Library of Congress as HAER collection OR-05. However, it should be noted that there is no indication of SHPO concurrence with the 1984 survey and its outcome. Future treatment of these buildings should be coordinated with the SHPO as previously indicated.

5.8.3 Traditional Cultural Properties/Sacred Sites

Although no TCPs and/or sacred sites have been identified or recorded at UMCD, they may be identified in the future. The reader is directed to subsection 7.3 for more information on TCPs. For reference, the CRM should be aware of National Register Bulletin No. 38, *Guidelines for Evaluating and Documenting Traditional Cultural Properties*. The documentation and protection of TCPs is conducted in compliance with the NHPA, the NAGPRA, EO 13007, Indian

Sacred Sites, the AIRFA, the memoranda concerning the use of eagle feathers for Native American religious purposes and government-to-government relations with Native American tribes, and the ARPA.

Determining the likelihood of TCPs and sacred sites at UMCD can be based on background research into the history and ethnography of the area and on consultation with Native American groups. Where there is no prior indication of traditional cultural concerns, documentation and consultation are conducted during the regular course of Section 106 public involvement, field inventory, and research. Documentation and consultation for TCPs are scaled to the scope of the specific undertaking. Most day-to-day management activities may have little potential to affect TCPs. However, if an undertaking is likely to affect an area or resource of known significance to a traditional group, the potential for TCPs may be high. If prior evidence suggests this possibility, an ethnographic specialist may be used to assist in the documentation and consultation.

The following measures will be taken for protection or mitigation. However, they should be further refined during consultations with representatives from affiliated groups. The following protection measures should be employed:

- **Avoidance:** Excluding mission activities from within the boundaries of the areas year round will mitigate impacts. Mission activities may also be adjusted if the area is used only on a seasonal basis.
- **Physical Protection:** If verbal, written, or graphic communications are not effective at keeping undertakings from encroaching on TCPs, physical barriers will be used to protect the area.

If mission activities cannot avoid TCPs, consultation with interested representatives from affiliated groups is required to determine the extent and degree of impact and the appropriate mitigation measures. It should determine what actions qualify as adverse effects, how close to the property mission activities can be conducted, and any differences between short- and long-term impacts. All parties should be aware of the proposed impacts and alternative mitigation measures.

5.8.4 Other Preservation/Protection Measures

Protection measures include educating UMCD military personnel, civilian employees, and other land users about the legal consequences of intentionally or unintentionally affecting cultural resources on installation lands. Such disturbance includes the collection of surface finds of prehistoric and historic artifacts and paleontological objects (e.g., fossils), as well as ground-disturbing collections. Another protection measure is to ensure that locational data is not distributed through survey reports or other documents accessible to the public. Nondisclosure of site information is covered under the Freedom of Information Act. Two other statutes and their implementing regulations (i.e., the ARPA, Section 9A [32 CFR Part 229.18] and Section 304[a] of the NHPA) also restrict the release of archaeological information. Exemption of this information is acceptable and preferred.

Additionally, the demolition and modification of historic buildings or structures (e.g., Buildings No. 1 or 2) are afforded the same protection measures as archaeological or traditional resources.

5.8.5 Research Questions

Below are listed archaeological research questions that are generally important to the Columbia River Plateau and may apply to future archaeological surveys at UMCD.

Site Integrity

- Are the sites intact and do they possess relative stratigraphy and subsurface features?
- Do sites from a given time period correlate with dunes, basaltic badlands, grasslands, or other tributary creeks?
- Do sites indicate that, during certain periods, some people were more bound to riverine resources?

Settlement Patterns

- Can sites dating from 5,000 Before Present (B.P.) indicate why people wintered along the Columbia River rather than in the adjacent valleys or foothills?
- Do sites along the middle Columbia River indicate assemblages along high terraces, and thus away from river flooding?

Chronology

- Can the assemblage of artifacts at a site enhance our understanding of chronology in the region?
- Can dating of assemblages, samples and/or artifacts be done?

Subsistence

- Do sites reflect subsistence activities carried out in nonriverine (upland) locales?
- How is highland exploitation reconciled with summer fishing in the seasonal round?
- Can the analysis of artifacts address questions of food acquisition, processing and storage, and how these all fit within the seasonal round of population movement?

Paleoenvironmental Studies

- Can the examination of ecofacts such as floral remains at a site provide indications about past environmental conditions and how these conditions may have changed through time?
- Can climatic interpretations at a site be integrated with sediment and geomorphological analysis to provide a more precise picture of past conditions?

5.9 STANDARD OPERATING PROCEDURES

The integration of cultural resources management objectives into the Army missions at UMCD is a central tenet of this ICRMP. Coordination procedures between natural resources management, master planning, and mission-related training activities are addressed in SOPs #1 through 9.

During the course of implementation of those cultural resources practices such as Section 106 of the NHPA that require specific public involvement, the public dissemination of information and the opportunity for public comment should be scheduled within the framework of existing public information meetings or events, either as part of the NEPA process or in cooperation with the UMCD PAO.

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5.9.1 Standard Operating Procedure #1

NATIONAL HISTORIC PRESERVATION ACT

SECTION 106

OVERVIEW

Section 106 of the NHPA directs that when federal funds are expended on an undertaking, prior to agency approval of the undertaking, the effect of that undertaking on historic properties must be taken into account. Section 106 also mandates protection of historic properties that have not yet been discovered, as in the instance of buried archaeological deposits. Buried archaeological deposits on federal property may also be protected by ARPA (see SOP #3). Failure to take the effects of an undertaking on historic properties into account, in accordance with NHPA Section 106 and 36 CFR Part 800, can result in formal notification from the Council to the Secretary of the Army of foreclosure of the Council's opportunity to comment on the undertaking, pursuant to the NHPA. A notice of foreclosure can be used by litigants against the Army in a manner that can halt or delay critical mission activities (AR-200-4, 2-3b[2]).

POLICY

For the purposes of this ICRMP, any project or other activity on UMCD (including those carried out by a tenant or other individual or organization brought on the installation by an operating contractor) qualifies as an undertaking if that "project, activity, or program is funded in whole or in part under the direct, or indirect jurisdiction of a federal agency" and if the project or activity has the potential to alter or change the characteristics of a property that is included in or eligible for inclusion in the National Register. Prior to the initiation of any activity on the project site, a person meeting the professional qualification standards established by the Secretary of the Interior (see Appendix D) will determine whether or not historic properties are present in the project's APE and will evaluate any discovered archaeological sites or other resources. An APE includes the actual project site as well as adjacent or noncontiguous areas where project activities may effect the character of a historic property.

If historic properties are located within a project APE and the project will have an effect on the historic properties, the SHPO, the Council (as appropriate), Native American tribes, and the interested public shall be granted the requisite time declared by law (36 CFR Part 800.5]) to comment on this determination, prior to the resumption of project activities (most normal comment periods for each agency is 30 days, and this period must be considered before the project or undertaking gets underway). All Native American Consultation will be conducted in accordance with U.S. Army Guidelines for Consultation with Native Americans, Native Alaskans, and Native Hawaiians, EO 13084 (Consultation and Coordination with Indian Tribal Governments), May 14, 1998 Presidential Memorandum (Government-to-Government Relations with Native American Tribal Governments), and 36 CFR Part 800.

PROCEDURES

The reader is referred to Appendices A, AR 200-4, “Cultural Resources Management,” and B, “36 CFR Part 800.” Additional useful information is presented in the Council guidelines *Identification of Historic Properties: A Decision-making Guide for Managers*. LCAAP may comply with Section 106 of NHPA using the process described in Appendix B. The actual implementation of these steps by UMCD may vary if a PA or other arrangements are made between the SHPO and UMCD. PAs are used when projects are recurring; when they will have similar effects, or for large, complex projects. The advantage of a PA is that actions covered by it do not have to be referred to the SHPO and Council for comment as long as the projects are conducted according to the agreement.

SECTION 106 COMPLIANCE

The process for complying with Section 106 of the NHPA is detailed in regulations issued by the Council entitled “Protection of Historic Properties” and published in 36 CFR Part 800. This guidance was revised on December 12, 2000 (effective January 11, 2001), and is provided in Appendix B. A flow chart of the process is provided at the end of this section.

The Section 106-review process can be simplified for routine activities through development and execution of a PA; however, in the absence of a PA or for activities not included in its

provisions; the CRM must follow the newly revised process. Generically, the process is as follows:

1. Determine if an Action is an Undertaking (800.3(a))

UMCD must first determine whether the proposed action is an undertaking, and if so, whether it has the potential to affect historic properties. As defined under the revised regulation, an undertaking is:

...a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal Agency, including those carried out by or on behalf of a federal Agency; those carried out with federal financial assistance; those requiring a federal permit, license or approval; and those subject to state or local regulation administered pursuant to a delegation or approval by a federal agency (800.16(y)).

Examples of undertakings include construction, demolition, rehabilitation and/or renovation of buildings, and land transfers (including leasing).

2. Identify SHPO/THPO (800.3.5[c])

UMCD must identify the appropriate SHPO or Tribal Historic Preservation Officer (THPO) and initiate consultation. The THPO may represent an “Indian tribe, band, nation, or other organized group or community, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.” Once contacted, the SHPO/THPO has 30 days to respond. If no response is received within this time frame, UMCD may proceed to the next step, or consult with the Council.

3. Prepare a Public Involvement Plan (800.3(e))

In consultation with the SHPO/THPO, UMCD must prepare a public involvement plan (800.3 (e)). The extensiveness of the plan will depend on the nature and complexity of the undertaking, and will identify appropriate points for notification and seeking input. Additional consulting parties are identified in the plan and invited to participate. Such

parties may include representatives of local governments or Native American tribes, applicants, and any organization or member of the public with interest in activities within the potentially affected area. All requests to become consulting parties should be considered. Organizations and individuals with interest in the undertaking are identified early in the process (under the new regulations) so that they can assist with the establishment of the Area of Potential Effect (APE) and the identification of any historic properties that might exist within the APE.

4. No Undertaking—No Potential to Cause Effects (800.3(a)(1))

If UMCD determines that there is no undertaking, as defined in 800.16(y), or there is an undertaking but it does not have the potential to cause effects on historic properties, there are no further obligations under Section 106 or the Council’s new regulations. UMCD is strongly advised to keep appropriate records of such findings in case questions are raised by members of the public or other parties at a later date.

Assuming that UMCD has determined that the undertaking does have the potential to cause effects on historic properties, the Agency proceeds to identify properties that might be affected.

5. Identify Historic Properties (800.4[b])

Define the APE. In order to identify the presence or absence of historic properties, UMCD, in consultation with the SHPO/THPO, determines the scope of the identification process, and establishes the APE (800.16 (d)). The APE is defined as “the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.” Examples of areas that would be within the APE include:

- Areas where land will be disturbed
- Areas from which the undertaking will be visible

- Areas that may be subject to changes in noise level
- Areas where land use changes may occur that result in potential effects on cultural resources
- Buildings or structures that may be modified.

Identify Historic Properties. Once the APE has been defined, UMCD, in consultation with any consulting parties, must identify any historic properties that might be affected by the undertaking. If the APE includes an NHL, UMCD must invite the Secretary of Interior to consult.

A historic property is “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (National Register) maintained by the Secretary. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe that meets the National Register Criteria. The term “eligible” for listing in the National Register includes both properties formally determined as such in accordance with regulations of the Secretary and all other properties that meet the National Register Criteria.

The standard for identification is a “reasonable and good faith effort” to identify historic properties, depending on a variety of factors (including, but not limited to, previous identification work) (800.4[b](1)). Therefore, UMCD should first determine whether historic properties have been previously identified within the APE and whether an archaeological or historic building survey and evaluation is required.

If the properties have not been previously investigated, background research may be necessary, and recordation of oral histories of knowledgeable persons may be appropriate. A survey is usually needed if the APE has not been previously investigated. Phased identification may be done when alternatives under consideration consist of corridors or large land areas, or where access to properties is restricted, and the nature of the undertaking and its potential scope and effect have therefore not yet been completely defined (800.4[b](2)). Final identification and evaluation may also be deferred if

provided for in an agreement with the SHPO/THPO, or other circumstances. Under this approach, Agencies are required to follow up with full identification and evaluation once project alternatives have been refined or access has been gained to previously restricted areas. Any further deferral of final identification could complicate the process and jeopardize an adequate assessment of effects and resolution of adverse effects.

If historic contexts have been developed in conjunction with other project planning efforts, they may be used to evaluate cultural resources identified in the survey; otherwise, appropriate contexts must also be developed. All potential historic contexts covering all periods of the property's existence at the national, state, and local levels should be examined. The SHPO/THPO may be contacted for information and advice regarding the best approaches for identification and evaluation.

6. Evaluate Historic Significance (800.4[c])

UMCD must now apply the National Register Criteria (36 CFR 63) to properties identified in the APE, and acknowledge the special expertise of Indian tribes when assessing the eligibility of a property to which they attach religious and cultural significance. Even though determinations of eligibility have already been completed, they may need to be re-evaluated in the future due to the passage of time or other factors, such as the identification of additional contexts or a loss in the integrity of the building or its environment.

Determinations of eligibility are to be made in consultation with the SHPO/THPO. If UMCD and the SHPO/THPO concur on the eligibility of a property for the National Register, the property is found to be eligible (800.4(c)(2)). If both parties concur on the non-eligibility, the property is determined not to be eligible for inclusion in the National Register. If concurrence is not achieved, or if either party objects to a determination of eligibility, that party may ask the Council to have the matter referred to the Secretary (Keeper of the Record [Keeper]). The Council retains discretion on whether or not to submit such referral. If an Indian tribe disagrees with a determination of eligibility involving a property to which it attaches religious and cultural significance, it can ask the Council to request that UMCD obtain a determination of eligibility. The intention is to

provide a means of ensuring appropriate determinations regarding properties situated off tribal lands to which tribes attach religious and cultural significance.

Guidance for determining whether archaeological, historical, or traditional cultural sites or features identified within the APE are “historic properties” is found in 36 CFR Part 60 and National Register Bulletin 15.

7. No Historic Properties Affected (800.11(c)(d)(1))

If no historic properties are present within the APE or the undertaking will have no effect on historic properties, UMCD prepares documentation according to 800.11(d) of this finding and notifies consulting parties. The documentation is submitted to the SHPO/THPO with a request for concurrence with a finding that “*no historic properties are affected*” (800.16(i)). If there is no objection from the SHPO/THPO or Council (if consulting), or no response is received within 30 days, the undertaking may proceed, and the Section 106-process is complete.

8. Assess Adverse Effects (800.5)

UMCD must proceed to the assessment of adverse effects when it finds that historic properties may be affected or the SHPO/THPO or Council objects to a “no historic properties affected” finding. UMCD must also notify all consulting parties and invite their comments.

If the undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualifies it for inclusion in the National Register, there will be an “effect.” This effect may or may not be adverse. Adverse effects occur when an undertaking may diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling or association. Reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative also need to be considered. Examples of adverse effects include physical destruction or damage; alteration not consistent with the *Secretary’s Standards*; relocation of a property; change of use or physical features of a property’s setting; visual, atmospheric, or audible

intrusions; neglect resulting in deterioration; or transfer, lease, or sale of a property out of federal ownership or control without adequate protections (800.5(a)(2)).

The SHPO/THPO, as well as Native American tribes attaching religious and cultural significance to identified properties, must be consulted when agencies apply the criteria of adverse effect. The Agency also needs to consider the views of consulting parties and the public.

No Adverse Effect (800.5(b)) (No Historic Properties Adversely Affected)

If a property is restored, rehabilitated, repaired, maintained, stabilized, remediated, or otherwise changed in conformance with the Standards (36 CFR 68), it will not be considered an “adverse effect” (assuming that the SHPO/THPO concurs). Where properties of religious and cultural significance to Indian tribes are involved, neglect and deterioration may be recognized as qualities of those properties and thus may not necessarily constitute an adverse effect.

If a property is transferred leased, or sold out of federal ownership with proper preservation restrictions, it will not be considered an adverse effect as in the current regulations. Transfer between federal agencies is not an adverse effect *per se*; the purpose of the transfer should be evaluated for potential adverse effects, so that they can be considered before the transfer takes place. Alteration or destruction—including recovery of data—of an archaeological site is an adverse effect, as is the demolition of historic structures.

If UMCD determines that an undertaking will have “No Adverse Effect” on historic properties, it must so notify all consulting parties including the SHPO/THPO (and the Council, if they are reviewing the finding under 36 CFR 800.5(c)(3)), provide them with documentation specified in 800.11(e) and provide for a 30-day period of review. The SHPO/THPO may suggest changes in a project or impose conditions so that adverse effects can be avoided, thus resulting in a “No Adverse Effect” determination. The new regulations are also written to emphasize that a finding of “No Adverse Effect” is only a proposal when UMCD submits it to the SHPO/THPO for review. This provision

acknowledges that the practice of “Conditional No Adverse Effect Determinations” is acceptable. If a SHPO/THPO fails to respond to a UMCD finding within the 30-day review period, UMCD may consider that to be SHPO/THPO agreement with the finding, and the project may proceed without further Section 106 requirements.

Under the revised regulations, the Council will not review “No Adverse Effect” determinations on a routine basis. However, it will intervene and review such determinations if it deems it appropriate, based on the criteria listed in Appendix A of the Regulations—“Criteria for Council Involvement,” or if the SHPO/THPO or other consulting party and UMCD disagree on the finding and cannot resolve the disagreement. In case of a disagreement, UMCD must specify the reasons for the disagreement and request Council comments (800.5[c](2)(i)). If Indian tribes disagree with the finding, they can request the Council’s review directly, but this must be done within the 30-day consulting party review period (800.5[c](2)(i)). In review of “No Adverse Effect” determinations, the Council will limit its review to whether or not the Criteria have been correctly applied. The Council has 15 days to respond as to whether it will participate, and then, an additional 45 days to respond with comments (800.7(c)(2)). UMCD should then proceed according to Council comments, as the Council’s determination is binding.

UMCD must retain records of their findings of “No Adverse Effect” and make them available to the public. The public should be given access to the information when they so request, subject to the Freedom of Information Act (FOIA) and other statutory limits on disclosure, including the confidentiality provisions in Section 304 of the NHPA. Failure of UMCD to carry out the undertaking in accordance with the finding requires UMCD to reopen the Section 106 process and determine whether the altered course of action constitutes an “Adverse Effect”.

Historic Properties are Adversely Affected (800.6)

When adverse effects are found, the consultation must continue (800.5(d)(2)) among the UMCD, SHPO/THPO, and consulting parties (including the Secretary, when APEs include NHLs) to attempt to develop and evaluate alternatives to avoid, minimize, or mitigate these impacts.

UMCD must notify the Council and determine Council participation when UMCD and SHPO/THPO have failed to agree, or when (800.6(a)(1)(i)(A-C)):

- UMCD wants the Council to participate
- The undertaking has an “Adverse Effect” upon an NHL
- A PA will be prepared.

A consulting party may also request the Council to join the consultation (800.6(a)(1)(ii)). The Council will decide on its participation within 15 days of receipt of a request (800.6(a)(1)(iii)), basing its decision on the criteria set forth in Appendix A of the new regulations; and will have an additional 45 days to provide comment.

Whenever the Council decides to join the consultation, it must so notify UMCD and the consulting parties. It must also advise the UMCD Commanding Officer of its decision to participate (800.6(a)(1)(iii)). This is intended to keep the policy level of the Agency apprised of those cases that the Council has determined present issues significant enough to warrant its involvement.

New consulting parties may enter the consultation if UMCD and the SHPO/THPO (and the Council, if participating) agree (800.6(a)(2)). If they do not agree, it is desirable for them to seek the Council’s opinion on the involvement of the consulting party. Any party, including applicants, licensees, or permittees, that may have responsibilities under an MOA must also be invited to participate as a consulting party.

UMCD is obligated to provide project documentation to all consulting parties at the beginning of the consultation process to resolve “Adverse Effects”. Particular note should be made of the reference to the confidentiality provisions.

UMCD must provide an opportunity for members of the public to express their views on an undertaking (800.6(a)(4)). This provision embodies the principles of flexibility, relating UMCD effort to various aspects of the undertaking and its effects upon historic properties. It must provide them with notice such that the public has adequate time and information to meaningfully comment. If all relevant information was provided at earlier stages in the process in such a manner that a wide audience was reached, and no new

information is available at this stage in the process that would assist in the resolution of “Adverse Effects” through avoidance, minimization or mitigation, a new public notice may not be warranted. However, this presumes that the public had the opportunity to make its views known on ways to resolve the adverse effects.

Although it is in the interest of the public to have as much information as possible in order to provide meaningful comments, this section acknowledges that information may be withheld in accordance with Section 304 of the NHPA. Particular attention is given to the confidentiality concerns of Indian tribes.

If UMCD and the SHPO/THPO agree on how adverse effects will be resolved, an MOA is executed (800.6(b)(1)(iv)).

9. Memorandum of Agreement (800.6(b)(2)(c)).

When resolving adverse effects without the Council, UMCD consults with the SHPO/THPO and other consulting parties to develop an MOA, which must include provisions for termination and reconsideration, and may include monitoring and implementation reporting requirements, as well as provisions for subsequent discoveries. If this is achieved, the Agreement is executed between UMCD and the SHPO/THPO (800.6(b)(1)(iv)) and filed with the required documentation with the Council. Other parties may be invited to sign the MOA; however, their refusal to sign will not invalidate the Agreement. This filing is the formal conclusion of the Section 106-process and must occur before the undertaking is approved. Standard Treatments (800.14[d]) if adopted by the Council may set expedited ways for completing MOAs in certain circumstances.

If the Council is not a part of the consultation, a copy of the executed MOA must be sent to the Council (and to all consulting parties), prior to approving the undertaking, so that it can have an understanding of UMCD’s implementation of Section 106 (800.6(b)(1)(iv)). This does not provide the Council an opportunity to reopen the specific case, but may form the basis for other actions or advice related to UMCD’s overall performance in the Section 106-process.

When the Council is involved, the consultation proceeds in the same manner, but the agreement of UMCD, the SHPO/THPO, and the Council is required for an MOA.

An MOA evidences an Agency's compliance with Section 106, and UMCD is obligated to follow its terms. Failure to do so requires UMCD to reopen the Section 106 process and bring it to suitable closure as prescribed in the regulations.

The signatories to an Agreement (i.e., MOA or PA) have the sole authority to execute, amend, or terminate the Agreement. Others who sign the Agreement as “concurring parties” do not have the same authority—their signature simply shows that they are familiar with the terms of the Agreement and do not object to it (800.6(c)(3)). Therefore, it is particularly desirable to have parties who assume obligations under the Agreement become formal signatories. However, once invited signatories sign MOAs, they have the same rights to terminate or amend the MOA as the other signatories (800.6[c](2)(i)).

10. Failure to Resolve Adverse Effects (800.7)

When the consulting parties cannot reach agreement, the consultation may be terminated by UMCD, SHPO/THPO or Council (800.7(a)). The Council then renders advisory comments to UMCD, which must be considered when the final UMCD decision on the undertaking is made. The Council may recommend further consultation to attempt to resolve the matter.

11. Terminating Consultation (800.7(a))

The UMCD Commanding Officer or an Assistant Secretary or officer with major DA- or DOD-wide responsibilities must request Council comments when UMCD **terminates consultation** (800.7(a)(1)). Section 110(l) of NHPA requires heads of Agencies to document their decision when an agreement has not been reached under Section 106.

If the **SHPO terminates consultation**, the Council and UMCD may conclude the Section 106-process with an MOA between them (800.7(a)(2)).

If a THPO terminates consultation, there can be no agreement with regard to undertakings that are on, or affect properties on tribal lands, and the Council will issue

formal comments (800.7(a)(3)). This provision respects the tribe's unique sovereign status with regard to its lands.

In cases where the **Council terminates consultation**, the Council has the duty to notify the DOA Preservation Officer and all consulting parties prior to commenting (800.8(a)(4)). The role given to the Agency's Federal Preservation Officer is intended to fulfill the NHPA's goal of having a central official in each Agency to coordinate and facilitate the agency's involvement in the national historic preservation program.

In all cases, UMCD must document the process and consider comments before approving the undertaking.

12. Foreclosure of Council Comment ((800.9)(b))

Foreclosure of Council comment occurs when completed actions make it meaningless for the Council to comment because the opportunity for the federal agency to consider and implement any alternative action that the Council may recommend has been foreclosed ((800.9)(b)).

If the Council believes UMCD may have foreclosed its opportunity to comment, the Council will so notify UMCD and the DOA Historic Preservation Officer, and give UMCD a 30-day opportunity to respond. If the Council determines that foreclosure has occurred, it transmits the determination to UMCD, the Secretary of the Army, and the public.

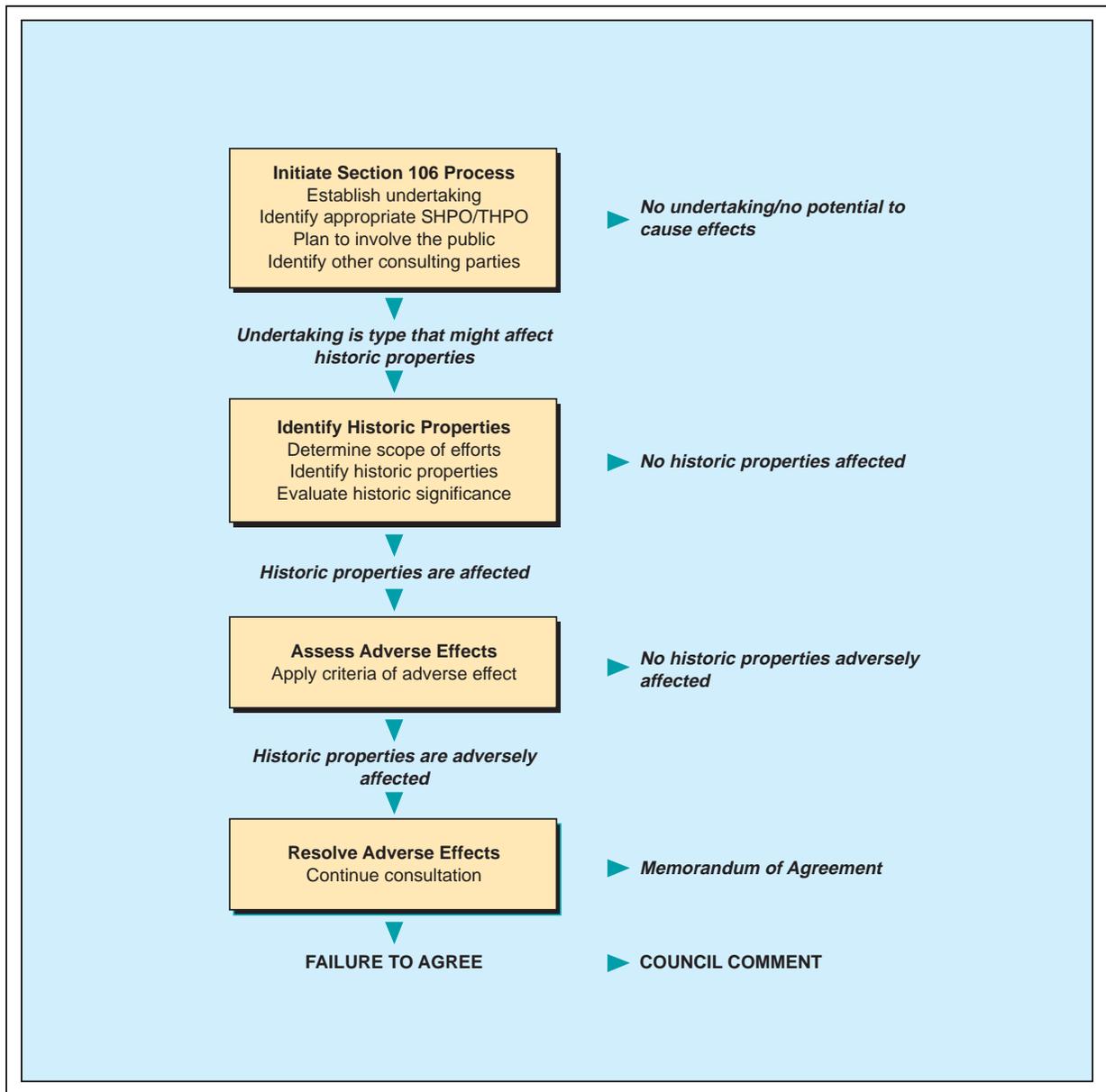
13. Unanticipated Discoveries (Post-Section 106 Review) (800.13)

Unanticipated discoveries happen most often with projects that involve ground-disturbing activities, although sometimes they involve unforeseen effects on a known historic property. In all cases of unanticipated discovery, UMCD should follow the processes established in conjunction with a PA developed pursuant to 800.14(b). If no PA is in place, and the discovery is made after the completion of the Section 106-process, UMCD shall make reasonable efforts to avoid, minimize or mitigate adverse effects (800.13(2)(b)), and:

1. If the undertaking has not yet been approved, or if construction has not started, consultation should continue to resolve the adverse effects.
2. If UMCD the SHPO/THPO and any Indian Tribe that might attach religious and cultural significance to an affected property agree that it is of value solely for its scientific, prehistoric, historic or archeological, UMCD may comply with the Archeological and Historic Preservation Act, in lieu of Section 106, and report of the actions upon completion to all parties.
3. If UMCD has approved the undertaking and construction has begun, UMCD shall identify an appropriate manner of resolving the adverse affect, and notify the SHPO/THPO, affected Indian Tribe and the Council within 48-hours of the discovery. All parties shall have 48-hours to respond with comments, which UMCD must take into account, and then carry out appropriate actions. When completed, UMCD must provide a report to all parties of its actions.

14. Emergency Conditions (800.12)

The Council's new regulations makes special provisions for actions undertaken in response to a disaster or emergency declared by the President, tribal government or State Governor, or which respond to other immediate threats to life or property. For the special provisions to apply, the UMCD action would be required within 30 days of the emergency (800.12(d)). If the installation proposes an emergency action as an essential and immediate response to such an emergency, the installation will notify the Council and SHPO/THPO and affected American Indian Tribes of its proposed actions and give them a seven-day opportunity to comment (800.12(b)(2)). However, if time does not allow for this seven-day period, the response time may be reduced as needed.



Section 106 Regulations
Flow Chart

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SAMPLE DOCUMENTS**Agency Letterhead**

LETTER NOTIFYING SHPO OF PROPOSED PROJECT

Mr. [Xxxxx]
Chief, Division of Archaeology and Protection
Bureau for Historic Preservation
[State] State Historical Preservation Office
[Street Address]
[City, State, Zip Code]

Dear Mr. [Xxxxx]:

The [Installation] is planning to construct a [Project Description] at [Project Site] located in [County], [State]. We request that you accept this letter as notification of this project under 36 CFR § 800.3. Pursuant to Section 800.4(a) of the regulations, we are assessing what information we need in order to further identify properties that may be affected by our proposed new construction. We have determined that the area of potential effects (APE) of construction on the site is as shown on the enclosed map.

Our intention at this time is to proceed with a [reconnaissance/intensive] archaeological survey of all areas subject to below ground disturbance within the project area for the purpose of identification of historic properties. We are prepared to conduct more detailed studies as needed to identify specific properties subject to effect, and to evaluate identified properties using the National Register Criteria (36 CFR 60.4), and to apply the Criteria of Effect and Adverse Effect (36 CFR 800.5(a)(1)) as needed.

We propose to enter into consultation with the federally recognized Native American Tribes and Tribal Historic Preservation Offices (THPO) who may be culturally affiliated with the [Project Site], representatives of local governments, and the interested public, in accordance with 36 CFR § 800.2(d) and § 800.3(c)(3). In the course of our study we would also seek to identify Native American groups whom we may need to consult pursuant to the Native American Graves Protection and Repatriation Act (NAGPRA) pending positive identification of any recovered artifacts as human remains of prehistoric origin.

All these activities will be carried out in consultation with your office, and, as necessary, with the National Register and the Advisory Council on Historic Preservation. We may modify our findings as needed based on this coordination and on the results of public review. We would appreciate your views on the above outline of our proposed approach, together with any other advice you may have. If we do not hear from you within thirty (30) days, we will assume that you concur with our approach and will proceed, but in any event a representative of our historic preservation office will be in touch with your office soon to further facilitate this coordination. If you have any questions about this project, please contact [Installation Environmental Coordinator] at (xxx) xxx-xxxx.

Sincerely,

Agency Letterhead

LETTER REPORTING NO HISTORIC PROPERTIES

Mr. [Xxxxx]
Chief, Division of Archaeology and Protection
Bureau for Historic Preservation
[State] State Historical Preservation Office
[Street Address]
[City, State, Zip Code]

Dear Mr. [Xxxxx]:

The [Installation] is planning to construct a [Project Description] at [Project Site] located in [County], [State]. We provided your office with notification of this project under 36 CFR § 800.3 on [DD/MM] of this year. We have conducted the background research, consultation, and sample field surveys pursuant to Section 800.4(a) and (b) of the regulations, in order to further identify properties that may be affected by our proposed new construction.

As a result of our efforts to identify and evaluate historic properties, we have determined, pursuant to 36 CFR §800.4(d)(1), that there are no historic properties present within the project area. We base our determination on the following documentation:

1. [A description of the undertaking, specifying the federal involvement, and its area of potential effects, including photographs, maps, drawings, as necessary];
2. [A description of the steps taken to identify historic properties, including, as appropriate, efforts to seek information pursuant to §800.4(b)];
3. [The basis for determining that no historic properties are present or affected];

We propose to notify the federally recognized Native American Tribes and Tribal Historic Preservation Offices (THPO) who may be culturally affiliated with the [Project Site], representatives of local governments, and the interested public, in accordance with 36 CFR § 800.4(d)(1) of the above determination.

If we do not hear from you or any of the other above referenced correspondents within thirty (30) days, we will assume that you concur with our finding and will proceed with our project. If you have any questions about this project, please contact [Installation Environmental Coordinator] at (xxx) xxx-xxxx.

Sincerely,

Agency Letterhead

LETTER DOCUMENTING THAT HISTORIC PROPERTIES HAVE BEEN FOUND

[Mr./Ms.] [Xxxxx]

Chief, Division of Archaeology and Protection

Bureau for Historic Preservation

[State] State Historical Preservation Office

[Street Address]

[City, State, Zip Code]

Dear [Mr./Ms.] [Xxxxx]:

The [Installation] is planning to construct a [Project Description] at [Project Site] located in [County], [State]. We provided your office with notification of this project under 36 CFR § 800.3 on [DD/MM] of this year. As a result of our efforts to identify and evaluate historic properties, we have determined, pursuant to 36 CFR §800.4(d)(2), that there are historic properties present within the project area based on the following documentation:

1. [A description of the undertaking, specifying the Federal involvement, and its area of potential effects, including photographs, maps, and drawings, as necessary.]
2. [A description of the steps taken to identify historic properties.]
3. [A description of the affected historic properties, including information on the characteristics that qualify them for the National Register.]
4. [A description of the undertaking's effects on historic properties.]
5. [An explanation of why the criteria of adverse effect were found applicable or inapplicable, including any conditions or future actions to avoid, minimize or mitigate adverse effects.]
6. [Copies or summaries of any views provided by consulting parties and the public.]

Pursuant to 36 CFR §800.5, we invite your views and assessments concerning the effects of our proposed project on the above referenced historic properties.

We propose to notify the federally recognized Native American Tribes and Tribal Historic Preservation Offices (THPO) who may be culturally affiliated with the [Project Site], representatives of local governments, and the interested public, in accordance with 36 CFR § 800.4(d)(1) of the above finding.

If we do not hear from you or any of the other above referenced correspondents within thirty (30) days, we will assume that you concur with our finding and will proceed to apply the Criteria of adverse effect in accordance with 36 CFR §800.5(a). If you have any questions about this project, please contact [Installation Environmental Coordinator] at (xxx) xxx-xxxx.

Sincerely,

Agency Letterhead

NOTICE OF INADVERTENT DISCOVERY

Mr. [Name of Indian Tribal Leader]
 President, [Specific Name of Indian Tribe] Nation
 [Street Address]
 [City/State]

Mr. [Name of Indian Tribal Leader]

I am writing to inform you of the inadvertent discovery of [Native American human remains/sacred objects/funerary objects/items of cultural patrimony] at [Installation] on [dd\mm\yy]. In accordance with the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), (43 CFR Part 10 Section 10.4), we recognize our responsibility to notify all Indian Tribal groups that may be culturally affiliated with any human remains, funerary objects, sacred objects, or objects of cultural patrimony that are discovered inadvertently on the [Installation] Military Reservation. We also request your assistance in the identification and notification of traditional religious leaders within your tribe who should also be consulted. This notification is required by NAGPRA.

The inadvertent discovery of [Native American human remains/sacred objects/funerary objects/items of cultural patrimony] occurred at xxxx hrs [Time Zone] Daylight Savings Time, in the [township, section, range, county], on [Installation] during [brief description of events leading to the discovery]. **[Include a statement similar to this example: A subsurface tank emplacement created by an M1 tank exposed human remains consisting of the left humerus, left ulna and several carpal bone fragments of the left hand of an adult human skeleton that our archaeologists believe to be of prehistoric origin].** In accordance with 43 CFR §10.4(c), all activity in the area of the discovery was immediately halted. The exposed [Native American human remains/sacred objects/funerary objects/items of cultural patrimony] were protected by the erection of a portable shelter over the excavation site and the area was cordoned off and protected by [Installation] military police.

I propose that a representative of the [Specific name of Indian tribe] Nation meet with our Native American Coordinator and Cultural Resource Program Manager at the conference room of Building xxxx on [Installation] at 0800 hours on [dd\mm\yy] to further consider the inadvertent discovery, the proposed interim treatment and the proposed disposition of the human remains in accordance with 43 CFR §10.6. If a representative of your [specific Indian tribe or Native Hawaiian organization] cannot meet with our representatives at the above referenced time and location, we request that an alternate meeting time and location be determined by telephone consultation within 24 hours of receipt of this notification.

The return certified mail receipt attached to this letter constitutes evidence of receipt of this notification by the [Specific name of Indian tribe] Nation. For additional information or assistance, please contact [Cultural Resources Program Manager] at (xxx) xxx-xxxx.

Sincerely,

Colonel.
 Commander

Copies Furnished:

PROGRAM COORDINATOR, BURIAL SITES PRESERVATION PROGRAM, STATE HISTORICAL SOCIETY OF [State], [Mailing Address]
 DR. FRANCIS McMANAMON, DEPARTMENTAL CONSULTING ARCHAEOLOGIST, NATIONAL PARK SERVICE, P.O. BOX 37127, WASHINGTON, DC 20013-7127
 MACOM
 HQDA (DAIM-ED-R) ASCIM, 600 ARMY PENTAGON, WASH DC 20310-600
 U.S. ARMY ENVIRONMENTAL CENTER, ATTN: SFIM-AEC-ECN, ABERDEEN PROVING GROUND, MD 21010-5481

5.9.2 Standard Operating Procedure #2

NATIONAL REGISTER EVALUATION STANDARDS

OVERVIEW

In accordance with Section 110(a)(1) and (2) of the NHPA, this SOP addresses the general procedures that will be used in the evaluation of prehistoric and historic archaeological sites and properties identified during cultural resources inventories of UMCD as to their eligibility for inclusion in the National Register. These standards are general in nature and must be interpreted relative to the merits of each site individually and relative to the number and redundancy of such sites on both an installation and regional basis. National Register Bulletin #15, *How to Apply the National Register Criteria for Evaluation*, gives detailed information regarding these evaluation standards and need not be repeated here.

Cost-effective and -efficient evaluations of archaeological sites for National Register significance are dependent upon development of clearly defined research (historic) contexts for specific geographical locations and/or specific site types. Such contexts identify areas of current research interests as well as gaps in recorded knowledge of prehistoric environments and cultures. In most instances, if research contexts are well defined, it is possible to identify those sites that have National Register significance at the time of discovery, rather than waiting for a formal evaluation to assess significance. Some general research questions are posed in Section 5.8.5 of this document. These research questions and others that are developed as time goes on will help guide UMCD in its evaluation and application of the criteria for evaluation.

POLICY

Standards specific to UMCD will take into account site formation processes within the geomorphological setting, paleoenvironmental reconstruction, and areas of research identified as gaps in current regional knowledge. All prehistoric and historic archaeological sites and historic properties will be accorded the administrative protection outlined in SOP #1 until the evaluation procedures discussed in this SOP are complete. Prehistoric and historic archaeological sites

determined, in consultation with the Oregon SHPO, not eligible for National Register nomination will not be protected, although, if feasible, measures will be taken to ensure that the site has been thoroughly documented. Prehistoric and historic archaeological sites and historic properties determined eligible for the National Register will be protected from damage by the procedures outlined hereafter until such sites are determined otherwise not eligible.

NATIONAL REGISTER SIGNIFICANCE

Significance, as it relates to historical properties, is defined by 36 CFR Part 60.4, *National Register Criteria for Evaluation*, as follows: “The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association.” This significance is further broken down into five criteria. Historic buildings and historic archaeological sites may qualify for the National Register under any of these five evaluation criteria. Prehistoric archaeological sites or properties are most often considered under Criterion D. The five criteria are quoted here for reference:

- Criterion A - “that are associated with events that have made a significant contribution to the broad patterns of our history”
- Criterion B - “that are associated with the lives of persons significant in our past”
- Criterion C - “that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction”
- Criterion D - “that have yielded, or may be likely to yield, information important in prehistory or history”
- Criterion Consideration G – “achieving significance within the past 50 years if it is of exceptional importance.” This exception is described further in the NPS's "How To" #2, entitled *How to Evaluate and Nominate Potential National Register Properties That Have Achieved Significance Within the Last 50 Years*.

STANDARDS FOR PREHISTORIC SITES

Contextual Relationships: Every individual site or group of similar sites must be related in some systematic way to some well-defined series of questions or known gaps in our data on the prehistory of the region. Contexts relevant to the UMCD area include, but are not limited to, settlement/subsistence systems, seasonal rounds, interaction spheres, resource extraction and utilization, and environmental/settlement relationships.

Information Content

To qualify for the National Register under Criterion D, the deposit must be shown to have yielded, or be likely to yield, information bearing on one or more specific research questions. Trivial matters or questions long since answered at other regional sites cannot be used. Research questions appropriate to prehistoric sites on UMCD may include the following:

- What does site distribution across the UMCD landscape indicate about the distribution of prehistoric resources? How does site distribution relate to seasonal habitation sites?
- Can specific archaeological features be identified that might provide insight into activities that relate to the prehistoric manipulation of the landscape?
- What resources (i.e., vegetation, wildlife, soils, water) attracted humans to the UMCD area?

STANDARDS FOR HISTORIC SITES

Information Yield of Individual Sites: To qualify for nomination to the National Register, an individual historic period archaeological site must contain deposits that are likely to yield, or have yielded, information significant to local, regional, or national history. Information obtained from a site must be specific and related to some aspect of local, regional, or national history that has not been well documented in the historical record.

Research questions appropriate to historic sites, structures, and buildings on UMCD may include the following:

- Do the spatial arrangements of farm and homesteads (including related features [e.g., camps, towns, roads]) on UMCD reflect material responses to environmental, ethnic, or other factors?
- What types of military activities are represented on UMCD? Did these activities contribute to the growth and/or development of the area?
- How did military development at UMCD influence and affect surrounding areas?

HISTORIC DISTRICTS

As defined in National Register Bulletin 15, *How to Apply the National Register Criteria for Evaluation*, a historic district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. A district derives its importance from being a unified entity, even though it is often composed of a wide variety of integral resources. While some districts have a unified historic and/or architectural development, “it is important to recognize that integral does not mean that a district must have homogenous resources or significance. Districts can include diverse resources that represent the area’s development over time. A commercial or residential area, for example, may form a unified whole, but have resources built in a variety of styles over a long period of time.”

The identity of a district results from the inter-relationship of its resources, which can either convey a visual sense of the over-all historic environment, or be an arrangement of historically or functionally related properties. Districts can also be comprised of both features that lack individual distinction and features that serve as focal points. A district may also contain buildings, structures, objects, sites, or open spaces that do not contribute to the significance of the district; however, the number of these types of features must not intrude on the district to the point that it no longer conveys the sense of a historic environment.

A district can also be a grouping of archaeological sites related primarily by their common components; these types of districts will not visually represent a specific historic environment. In archaeological districts, the primary factor to be considered is the effect of any disturbances on the information potential of the district as a whole.

Historic Districts must meet at least one of the same National Register criteria as individual sites or features (i.e., Criteria A-D).

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5.9.3 Standard Operating Procedure #3

ARCHAEOLOGICAL RESOURCE PROTECTION ACT OF 1979

OVERVIEW

This procedure implements the provisions of Public Law 96-96 (93 Stat. 721; 16 U.S. Code [U.S.C.] Section 470aa-470MM), the ARPA of 1979, and the final uniform regulations issued under the Act by DOD (32 CFR Part 229). The ARPA makes the unauthorized excavation, removal, damage, alteration, or defacement of any archaeological resources on federal lands a federal felony. The sale, purchase, exchange, transport, or receipt of any archaeological resources obtained in violation of this, or related laws, is also a federal felony under the ARPA.

POLICY

Archaeological resources from U.S. Army installations belong to the installation, except where the NAGPRA requires repatriation to a lineal descendant or Native American tribe. The Installation Commander will ensure that Security Police, installation legal staff, the installation PAO, and the natural resources management staffs are familiar with the requirements and applicable civil and criminal penalties under the ARPA. In instances where proof of violation may be insufficient to obtain a conviction under the Act, or where deemed otherwise advisable, the staff JA may choose to assess a civil penalty under the provisions of 32 CFR Part 229.15. Such actions may be particularly applicable to violations of Section 106 of the NHPA (36 CFR Part 800) and the procedures outlined in SOP #1 of this ICRMP. For the purposes of U.S. Army compliance with the ARPA, the Installation Commander is considered the federal land manager as defined in 32 CFR Part 229.3(c). As the federal land manager, the Installation Commander, in coordination with the installation CRM or other qualified archeologist or historic preservation specialist, may determine that certain archaeological resources in specified areas under their jurisdiction, and under specific circumstances, are not, or are no longer, of archaeological interest and are not considered archaeological resources for the purposes of the ARPA (in accordance with 32 CFR Part 229.3[a][5]). All such determinations shall be justified and documented by memorandum and shall be formally staffed for review through the MACOM to

HQDA (AEC) prior to final determination (AR 200-4(2-6[g]) in accordance with AR-200-4 (2-6(b)).

ARPA PERMIT PROCEDURES

Individuals wishing to undertake archaeological investigations that may result in the excavation and/or removal of archaeological resources from UMCD shall obtain a permit issued by the USACE, Los Angeles District, on the approval of the Installation Commander. The CRM will monitor the field investigations of persons with archaeological permits to ensure: compliance with the requirements of 32 CFR Part 229, 43 CFR Part 10, and the terms and conditions of the permits, as follows:

- That valid interests of federally recognized Native American tribes on the permitted activity are addressed in a manner consistent with the requirements of the NHPA and the NAGPRA
- That permitted activities are performed according to applicable professional standards of the Secretary's *Standards and Guidelines for Archaeology and Historic Preservation*.

The UMCD CRM shall not be required to obtain a permit under the conditions established in 32 CFR Part 229.5(c).

This guidance states:

Persons carrying out official agency duties under the federal land manager's direction, associated with the management of archaeological resources, need not follow the permit application procedures of Section 299.6.

PUBLIC NOTICE

The CRM will ensure that a brief notice outlining the acts prohibited under the ARPA and the criminal penalties assessed under the Act are published in the installation newspaper at least once each calendar year. This notice will include the prohibition of recreational use of metal detectors except in authorized areas and when used by Army personnel, contractors, or permittees in

association with official cultural resources management activities in accordance with AR 200-4 (2-6(c)) (see Appendix B).

ANTIQUITIES ACT OF 1906

Paleontological remains and deposits are considered to be objects of antiquity pursuant to the Act (16 U.S.C. Section 431-433). Any paleontological remains and deposits identified on the UMCD military installation would belong to the installation and are protected under this Act from appropriation, excavation, injury, or destruction. The CRM will be notified of any discovery of remains or deposits suspected to be of paleontological origin and will institute appropriate measures for the protection and preservation of such objects in consultation with the Installation Commander and HQDA (AEC).

PROTECTION OF ARCHAEOLOGICAL SITES

Information documenting the condition of, and threats to, archaeological sites on UMCD would be completed during the Phase I inventory process. Protection of any National Register sites identified in the future will consider potential impacts from human activities, as well as their physical location on the landscapes.

SITE PROTECTION PROCEDURES

Any archaeological properties will be afforded a protection strategy that is appropriate to setting and location. Measures could include surrounding the site with an artificial barricade appropriate to the nature of the military mission or other activities that routinely occur in that area. All site protective measures will be documented appropriately prior to and after completion.

The proper UMCD personnel will be notified of all sites that require protection so that necessary measures may be instituted to preclude site damage during military training exercises. Where protection of a specific site would degrade or prohibit the completion of the UMCD mission, consultation will be conducted with the Oregon SHPO and the Council in accordance with 36 CFR Part 800.5.

Periodic monitoring of any identified sites would take place as time and funding permits. At these times, any change in the site's condition since the last monitoring visit would be re-evaluated and appropriate actions implemented to ensure continued site protection.

5.9.4 Standard Operating Procedure #4

INVENTORY PROCEDURES

OVERVIEW

This SOP establishes the archaeological field and laboratory methods and procedures to be followed for archaeological inventories conducted on lands administered by UMCD.

Archaeological inventories are generally conducted for the purpose of complying with the NHPA, the ARPA, AR 200-4, and other federal and state laws. These laws require identification and management of cultural resources under the jurisdiction of UMCD. UMCD is required to take into account the effects of an undertaking on historic properties and to seek approval/concurrence from the SHPO and, when appropriate, to afford the Council a reasonable opportunity to comment.

The inventory phase is commonly referred to as a "survey" because the most common tactic used to discover cultural resources sites is the pedestrian survey. However, the phase itself should not be equated with survey tactics alone, because other kinds of discovery tactics are possible as well. The suite of discovery tactics includes various remote sensing approaches (e.g., aerial photography, ground-penetrating radar), sample excavations (e.g., backhoe trenching, auguring, shovel probing), intensive examination of linear stratigraphic exposures (stream and riverbanks, erosional and road cuts), and interviews of local key informants.

POLICY

All phases of archaeological investigation, including reconnaissance and intensive archaeological survey procedures, are defined in the Secretary's *Standards and Guidelines for Preservation Planning, Identification, Evaluation, and Registration*.

Where a conflict is found between this SOP and a statement of work in a contract or delivery order, the provisions of the contract or delivery order will apply, as long as the provisions of

NHPA, ARPA, and NAGPRA and related federal and state laws are fully met and complied with.

RESPONSIBILITIES

The UMCD Cultural Resources Manager is responsible for the following:

- Ensuring that this SOP is implemented by all individuals undertaking inventories on UMCD lands
- Ensuring that the inventory is adequate for determining the presence or absence of archaeological and historical resources in the APE
- Reviewing all survey reports and determining the eligibility for the National Register of all resources encountered in the APE
- Initiating consultation and Section 106 submissions to the Oregon SHPO and the Council, when appropriate
- Curating all reports and artifacts associated with inventory projects
- Deciding National Register eligibility for all cultural resources found on the installation.

The Contract Archaeologist is responsible for the following:

- Ensuring that all activities performed are conducted under the direct supervision of personnel who hold a current permit issued by the Oregon State Museum, or other issuing authority duly authorized by the state of Oregon. Proof of such permits shall be included in the proposal and reports.
- Ensuring that all activities performed are conducted under the direct supervision of personnel who meet the applicable professional qualifications standards set forth in Federal Register, Volume 62, Number 119 (see Appendix F).
- Obtaining permission from the UMCD CRM to conduct the level of archaeological work required by the proposed action.
- Conducting inventories in compliance with the guidelines set forth in this SOP and the UMCD Scope of Work.

If cultural resources are found as a result of the inventory, the contract archaeologist assesses the potential effects of the action on those resources, recommends properties to the UMCD CRM for inclusion in the National Register, and recommends a treatment plan (mitigation measure) to the UMCD CRM for preserving significant cultural resources. The contract archaeologist is not responsible for making Section 106 submissions to the SHPO or the Council. These responsibilities rest with the UMCD CRM.

The proponent of an action is responsible for the following:

Funding cultural resources inventories will be negotiated between the proponent and the Command Technology Directorate Environmental Office for actions on UMCD lands.

- Obtaining permission to conduct cultural resources inventories on non-UMCD lands affected by the proposed action. This permission will be obtained through the UMCD CRM.
- With certain exceptions, the proponent is responsible for clearly marking the land use area on the ground by staking, flagging, or some other visible means in advance of cultural resources inventories.

PROJECT MANAGEMENT PROCEDURES

These specific procedures will aid the CRM in tracking projects and reporting those projects and actions to the Depot Commander and the MACOM.

- The project area will be plotted on the correct USGS Master location map and entered into the GIS database for cultural resources.
- A project folder will be set up, which will track all managerial aspects of the project. This folder shall include, but not be limited to, the following standard UMCD forms and subfolders:
 - Cultural Resources Project Checklist to track task completion dates
 - Project Analysis Sheet describing the scope of the project
 - In-house Cost Estimate
 - Contracted Cost Estimate
 - Correspondence.

INVENTORY AND SITE RECORDATION METHODS

The following methods of inventory are in accordance with the Oregon SHPO guidelines for archaeological identification and survey activities. A more detailed description of the requirements is provided in Appendix L.

Surveys

Any initial archaeological reconnaissance survey will involve both archival research and field inspection in order to determine any evidence of prehistoric or historic occupations and/or activities.

Survey Procedures

There exists a great variation in the number and types of field surveys. Accordingly, specific field survey methodology and the degree of effort expended should be directly proportionate to the goals, research parameters, and CRM needs that have fostered the survey.

While the Oregon SHPO recognizes that 100-percent surveys are not always necessary, a survey will generally be determined adequate if it complies with the following:

- The area is stratified according to an approved agency-SHPO plan, or in the absence of such a plan, a project-specific survey design.
- Recommendations of eligibility are made for each site.
- The expected results that were identified prior to the inventory are evaluated against the actual finds in the report. If sites are found, minimally their relationship to the strata should be illustrated or counted as a way to evaluate how well site density fits the stratified design.
- The overall required research design is evaluated and updated on a regular schedule.

Survey Report

At the conclusion of the field survey, a report must be prepared and forwarded to the Oregon SHPO. For the convenience of the writer, the report may be prepared and transmitted electronically using the Oregon SHPO Standard Site Form User Manual found on the SHPO website at http://www.prd.state.or.us/about_shpo.html (see Appendix L).

The report will document:

- The kinds of properties explored and why.
- The boundaries of the areas surveyed, and if stratified, the different strata.
- The method(s) of survey, number of surveyors on teams, transect intervals, transect direction, subsurface examination procedures, and a calculation of acres in the survey area.
- All records of the precise location and extent of all properties identified.
- Information on the appearance, significance, integrity, and boundaries of each property.

DATA MANAGEMENT

All archaeological sites identified within the project area will require a Smithsonian trinomial site number obtained from the Oregon SHPO, or other state entity that disseminates those numbers, to replace the temporary site number.

The site sketch map will be prepared, and the site location should be recorded on a USGS topographic map.

Any photo data collected must be processed and compiled. Hard copies of the photo log will be filed in the project folder and individual site folders. Once a UMCD project has been completed, the originals of reports, field notes, maps, and drawings are the property of UMCD.

Isolated finds will be assigned a unique Umatilla Chemical Report Isolate Form (UMCDIF) number and entered into an isolate database. A hard copy of the Isolate Form will be filed with

the Project Folder. Site information will be filed by individual sites. Files should include completed Oregon state site forms, field recordation forms and notes, photo log, any associated graphics, and SHPO and Council concurrence, if necessary.

FINAL INVENTORY REPORT

Pursuant to standards established by the Oregon SHPO, The Final Inventory Report shall include, but is not limited to:

- Title page
- Executive summary or abstract (for large projects)
- Table of contents
- List of figures
- List of tables
- Introduction describing the proposed project that precipitated the survey
- Research design, including objectives and methods
- Field inspection, including background research and on-site inspection
- Results, including findings of fact, conclusions, recommendations, evaluation of the expected vs. the actual, along with the location and data of archives
- References
- Consultations (when and if applicable with concerned Indian tribes, SHPO, local preservations, federal and state agencies, approval of report by federal agency if on federal land)
- Appendices, including site inventory forms, with a location map attached to each form; list of informants, if any; list of participants in field study only; and a signature line for the reviewer and reviewer's professional qualifications.

5.9.5 Standard Operating Procedure #5

INADVERTENT DISCOVERY OF ARCHAEOLOGICAL DEPOSITS

OVERVIEW

Archaeological investigation methods are designed to discover material evidence of past cultural activities. It is possible, however, that buried archaeological deposits may remain undetected during the survey process, only to be exposed by later construction or other ground-disturbing activities.

POLICY

In the event that archaeological deposits are encountered during any construction or excavation activities, the activity shall stop and the CRM shall be notified. Because of the potential for each archaeological deposit to contain Native American human remains or cultural materials, failure to report discovery of archaeological deposits may result in violation of the NAGPRA, the ARPA, and other related federal and state laws, resulting in fines and penalties against UMCD and its Commander. If it is determined that human remains encountered during a project are not of Native American origin, the Security Police should be notified immediately. The Provost Marshal will contact the County Medical Examiner or Coroner for further action.

PROCEDURES

When notified of the possible discovery of archaeological deposits or material, the CRM will visit the discovery site within 1 working day of notification to examine the discovered material and any in situ deposits. A determination of NAGPRA, ARPA, and NHPA compliance will be made by the CRM upon identification of the discovered material as being archaeological or historic in origin. If the CRM determines that the site contains human remains, funerary objects, sacred objects, or objects of cultural patrimony, the procedures in SOP #8 of this ICRMP will be implemented. If the objects are determined not covered under the NAGPRA, the procedures outlined in this SOP will be followed.

If, upon examination, the discovered materials are clearly of Euro-American origin, the CRM will conduct a test of the discovery site, following procedures outlined in SOP #6. The test will include evaluation of the primary context of the deposit, probable age, and assessment of significance to determine National Register eligibility.

If, upon examination of the recovered material, it appears that the discovered deposits are of natural origin and not of paleontological significance, the CRM shall advise the project manager that project activities may proceed.

If archaeological materials are present and disturbance has been limited, the CRM will recommend that the activity be relocated to avoid the site until compliance with the Section 106 process and evaluation for National Register eligibility may be completed. If the activity cannot be relocated, the CRM shall consult with the Oregon SHPO. Unless the activity is associated with an actual emergency (natural disaster or declaration of war), site activity must stop until consultation with the Oregon SHPO and/or Council is completed. Failure to cease activities that intentionally destroy archaeological deposits prior to evaluation and determination of National Register eligibility in accordance with 36 CFR Part 800 may result in fines and penalties under ARPA against the project manager, and in some instances, the Installation Commander.

The CRM will contact the Oregon SHPO to obtain concurrence on the National Register eligibility of the site. If both the Oregon SHPO representative and the CRM agree that the discovered archaeological deposit is not eligible for the National Register, the correspondence will be documented. The CRM may then advise the project manager to proceed with project activities, although the CRM will monitor the remainder of excavation activities to ensure that National Register-eligible deposits are protected.

If, in the opinion of either the Oregon SHPO or the CRM, the recovered materials are of insufficient quantity, or are otherwise nondiagnostic, to make a valid assessment of National Register eligibility, an emergency mitigation plan may be developed by the CRM, in consultation with the Oregon SHPO. Further ground-disturbing activities in the immediate site vicinity shall be halted pending the accomplishment of the emergency mitigation plan. The

CRM may request that an Oregon SHPO representative be present on site to consult directly on the assessment of the site's National Register eligibility. The Oregon SHPO may choose to send a representative to observe the emergency mitigation plan without prior request by the Army; however, access to the site by non-Army personnel must be approved by and coordinated with the Conservation Office.

If the site is determined eligible, or if the Army and the Oregon SHPO cannot reach an agreement on determination of eligibility, the following alternative actions are available:

- Reconsider relocating the project to avoid adverse effect. (This is always considered the best course of action.)
- Develop an MOA with the Oregon SHPO that specifies the scope and extent of data recovery required to mitigate the project impact.
- In the event UMCD and the SHPO cannot reach an agreement on a determination of eligibility, UMCD should request from the Keeper a final determination of eligibility.

Where data recovery (mitigation) is limited in scope and such action is amenable to the Oregon SHPO, the Army may elect to proceed without development of an MOA. All aspects of data recovery will be fully documented and reported to the Oregon SHPO in the form of a written report at the termination of data recovery efforts.

When the recovery of human remains is considered likely, the Army shall comply with the NAGPRA and related federal law. Such procedures will be coordinated with the Oregon SHPO and Native American Tribes that may be culturally affiliated to the human remains or other items covered by the NAGPRA. Further, it must be noted that there are instances (such as in the case of the discovery of human remains of undetermined origin, or the lease of buildings and/or structures) in which compliance with state law is requisite, even on a federal installation. At any time in which the UMCD CRM is uncertain as to the applicability of state law, that the JAG should be consulted for guidance to insure full and proper legal compliance at all levels.

The Army may elect to comply with 36 CFR Part 800.13, developing and implementing actions that take into account the effects of the undertaking on the property and requesting comments of

the Oregon SHPO and the Council, if appropriate. Section 106 and 36 CFR Part 800 do not require the federal agency to stop work on the undertaking. However, depending on the nature of the property and the undertaking's apparent effects on it, the agency official shall make reasonable efforts to avoid or minimize harm to the property until the requirements of 36 CFR Part 800 are met.

SYNOPSIS

The following synopsis of this SOP shall be made known on all proposed actions and excavation permit approval forms:

- There is always the potential for previously unidentified archaeological deposits not discovered during the initial inventory process. If archaeological materials are discovered during construction or excavation activities, the CRM shall be notified, and the materials shall undergo review as required under the NHPA.
- In the event that Native American human remains or cultural items are discovered, federal law directs specific procedures that must be followed and establishes criminal and civil penalties for noncompliance. If human remains are encountered, all project activity on or near the discovery site shall cease immediately. The human remains shall be protected from further disturbance and the CRM notified immediately.

5.9.6 Standard Operating Procedure #6

NATIONAL REGISTER ELIGIBILITY TESTING

OVERVIEW

The two management goals of a Class III inventory are (1) to locate cultural resources, and (2) to evaluate as many of these resources as possible to determine eligibility for inclusion in the National Register. Data limitations inherently exist in the inventory phase; namely, surface reconnaissance reveals only those features and artifact assemblages that are visible on the surface, so vertical site boundaries cannot be determined and the presence of subsurface cultural deposits can only be surmised. If, due to these limitations, some sites cannot be conclusively demonstrated to have sufficient data content on the surface to be judged eligible for the National Register, these sites must proceed to the next round of the management process, commonly referred to as "testing." Data obtained during testing are collected solely in order to evaluate a site's eligibility for inclusion in the National Register and not to actually test any scientific hypotheses. The management goal of inventory and testing is very simply to determine site data potential, and therefore, National Register eligibility. This SOP establishes the archaeological field and laboratory methods and procedures to be followed for testing.

POLICY

This stage in archaeological investigations is defined in the Secretary's *Standards and Guidelines for Preservation Planning, Identification, Evaluation, and Registration* (48FR44716-28). The UMCD CRM may decide to modify the stated procedures outlined in this SOP for a particular project or application. Where a conflict is found between this SOP and a statement of work in a contract or delivery order, the provisions of the contract or delivery order will apply, as long as the provisions of the NHPA, the ARPA, the NAGPRA, and related federal and state laws are fully met and complied with.

An archaeological site predictive model should continue to be developed. Those areas identified by the predictive model as having a high potential for subsurface archaeological sites will be

given a higher priority for subsurface testing if eligibility cannot be determined by surface recordation. This should not be interpreted as excluding surface sites with no buried components from consideration for nomination to the National Register. Surface sites that meet National Register criteria may not require subsurface testing before such a determination is made.

The two principal characteristics of an archaeological site that serve as the basis for National Register eligibility are site integrity and the likelihood that the site will contain information important to prehistory or history (Criterion D). The information potential of a site is referenced to research questions that are interpreted within the contexts of UMCD and the surrounding geographical region. UMCD archaeological site research questions focus on regional significance. Testing will be used to conduct a formal evaluation of site significance in accordance with 36 CFR Part 800.4(c). If testing and evaluation indicate that a site does not possess sufficient significance for inclusion in the National Register, the Oregon SHPO will be so advised by written report. All sites determined eligible for nomination to the National Register will be identified as protected sites until formal National Register nomination is complete and the Army Federal Preservation Officer (FPO) at HQDA has forwarded the National Register nomination to the Keeper for final determination. Sites determined not eligible for the National Register will not be afforded further protection.

FIELD METHODS

In many cases, the key limitation of the inventory phase is that it does not allow for a full determination of site data potential with regards to a subsurface perspective. The set of tactics used for testing consists of controlled manual excavation, intensive surface artifact collection units, and in rare circumstances, testing with mechanical devices (e.g., backhoe or remote-sensing technology). Test pits enhance the probability of encountering artifacts and/or features. The stratigraphy of a site is often discernible on the vertical faces of the test pit.

Test Pits

Before subsurface excavation ensues, the exact location of the test pit must be determined and mapped using a Global Positioning System (GPS). The test pit locale must be cleared by tech

escort and/or explosives ordnance disposal support if necessary. The location of the test pit(s) will be based on the distributions of surface artifact assemblages and visual observation of feature locations. The depositional context, including geomorphologic processes and known stratigraphic sequences, will also be taken into consideration when selecting where to place test pits. Much of the information on the potential for intact subsurface cultural materials will be addressed in the predictive model.

The number and configuration of test pits will be determined on a case-by-case basis for each site. The number and configuration is determined by (1) the missing, or unknown, data content (e.g., does the site have radiometric samples and macrobotanical remains?), in conjunction with (2) the overall size of the site, and (3) the suspected internal diversity of features and artifacts. The number of test units should be the minimum number necessary to conclusively determine data potential and eligibility.

As a standard, test pits generally measure 1 meter by 1 meter each. Depths of pits are determined by empirical site stratigraphy. The maximum depth of test pits will be limited to about 1.5 meters below the surface, unless excavation is being augmented by mechanical excavations and/or safety shoring. Deeper deposits must be investigated by "stepping down" multiple test pits.

The actual excavation will proceed using arbitrary 10-cm intervals until natural stratigraphy can be identified. Each excavation level, arbitrary or natural, will be assigned a feature number for discussion in the field notes. Appropriate plan and stratigraphic views will be documented throughout the excavation process.

The excavated sediments will be screened using 1/4-inch and 1/8-inch mesh stacked screens. All artifacts and faunal, lithic, and botanical remains will be collected and labeled with field specimen numbers. Artifacts exposed in situ will be recorded by reference to stratigraphic level and spatial relationship with other artifacts and features on the same horizontal surface. The provenience will be recorded on a plan-view map and photographed with other intact features when possible.

Finally, in order to maximize data recovery, bulk sediment samples will be collected and subjected to analysis for "micro" data sets such as radiocarbon, pollen, phytolith, soil chemistry, and macrobotanical content. The sediment samples will be collected in the field and processed at an appropriate laboratory. The recovered materials will be sent to laboratories with the necessary equipment to conduct the actual analyses. These samples can contain small botanical and environmental "ecofacts" missed by screening. Presence of these data types may be needed to demonstrate a site's data potential to address chronometric, paleoenvironmental, and economic research questions.

Intensive Surface Tabulation or Collection Units

In addition to subsurface test units, intensive recording and/or collection of the surface artifact assemblage may be needed to document remaining uncertainties in overall data potential. The total number, sizes, and configuration of surface sampling units must be determined on a case-by-case basis for each site based on missing (or unknown) data content (e.g., does the assemblage have more biface flakes or more core flakes?) together with the size of the site and the diversity of artifacts present. Lithic tabulation sheets will be used to record material types and flaking stages of lithic debitage. Again, the number of surface tabulation units should be the minimum number necessary to conclusively determine data potential and eligibility.

Other Testing Procedures

Other testing procedures may be necessary and appropriate, including, but not limited to: phosphate testing, aerial photograph interpretation, and remote sensing to determine spatial patterning, mechanical stripping, and backhoe excavations when the cultural deposits exceed 1.5 meters.

Selecting a Test Method and Evaluation

Because of the many data limitations associated with testing tactics, often a combination of these tactics can conclusively determine site data potential. In order to select a testing method(s), a prioritized hierarchy of data needs should be determined for each site or location, based on (1) data lacking for the geographic region, and (2) the likelihood of said site to yield such

information. The data recovered in these testing procedures will then be evaluated to determine eligibility for inclusion in the National Register. Evaluation will proceed according to SOP #2.

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5.9.7 Standard Operating Procedure #7

ANALYSIS AND CURATION OF CULTURAL MATERIALS

OVERVIEW

Perhaps the most compelling reason for establishing and maintaining a proper curation facility for archaeological artifacts, aside from the fact that each federal agency is required to do so by law, is that the collected prehistoric and historic material information will be the only lasting evidence of the historical past of UMCD. Without proper conservation and storage, archaeological artifacts deteriorate, become misplaced, or are otherwise subject to the many vicissitudes of time.

A curation facility is specifically designed to serve as a physical repository where artifacts are sorted, repackaged, assessed for conservation needs, and then placed in an appropriate, environmentally controlled storage area. Proper curation also includes a review and update of all paper records. An important component of artifact curation is the selection of artifacts for site-specific reference collections. Artifact data is entered into a database, which is an important management and research tool. The overall goal of the federal curation program, as set forth in 36 CFR Part 79, is to ensure the preservation and accessibility of artifacts for use by members of the public interested in the archaeology of the region.

As the cultural resources inventory of UMCD continues, the number of artifacts collected from sites will also continue to increase. AR 200-4 requires the Installation Commander to ensure that all archaeological collections and associated records, as defined in 36 CFR Part 79.4(a), are processed, maintained, and preserved in accordance with the requirements of 36 CFR Part 79. Currently, UMCD does not have an artifact repository that meets the standards specified by 36 CFR Part 79. Until funding is approved, UMCD artifacts will temporarily be curated in the CRM's office until they are turned over to a long-term curation facility that meets the requirements of 36 CFR Part 79.

36 CFR PART 79 REPORTING AND INSPECTION REQUIREMENTS

Reporting Requirements

The annual Secretary's report to Congress requires an assessment of archaeological records and materials in federal repositories. Presently, UMCD has no archaeological material curated on site or with other institutions, although this may change over time.

Status of Curation Funding

Curation activities are not adequately funded. Archaeological compliance projects are funded through the Command Technology Environmental Office; however, long-term curation of artifacts and associated documentation is not provided. Current policies regarding collection of artifacts are to collect little or no artifacts during surveys. Assessment and recordation of artifacts must take place in the field during the work. Accession and curation fees, if and when necessary, should be built into project costs. Artifacts would be housed at an accredited curation facility when funds are available. There are no plans for long-term curation of collections on post at UMCD.

Inspection Requirements

Inspections of federally curated archaeological collections, if any, are to be conducted periodically in accordance with the Federal Property and Administrative Services Act (40 U.S.C. 484) and its implementing regulation (41 CFR Part 101). Consistent with 36 CFR Part 79.11(a), the CRM shall:

- Maintain a list of any U.S. Government-owned personal property received by the CRM.
- Periodically inspect the physical environment in which all archaeological materials are temporarily stored for the purpose of monitoring the physical security and environmental control measures
- Periodically inspect the collections in temporary storage for the purposes of assessing the condition of the material remains and associated records, and of monitoring those remains and records for possible deterioration and damage

- Periodically inventory the collection by accession or lot or catalog record for the purpose of verifying the location of the material remains and associated records
- Periodically inventory any other U.S. Government-owned personal property in the possession of the CRM
- The CRM shall request an annual status report from each curation facility where UMCD collections are housed.

ARTIFACT ANALYSIS

Before permanent curation, all artifacts recovered on UMCD, if any, will be analyzed using commonly accepted methods for artifacts in the immediate region. Artifact analyses will be consistent with current archaeological research objectives for the region. Only in the case of data recovery on sites should there be collections made. Collection should be kept to a minimum and should include only those artifacts that would be pertinent to assessment of temporal and subsistence-related research matters.

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5.9.8 Standard Operating Procedure #8

NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT

OVERVIEW

This procedure implements the provisions of the NAGPRA; Public Law 101-601 (25 U.S.C. Sections 3001-3013); *U.S. Army Guidelines for Consultation with Native Americans, Native Alaskans, and Native Hawaiians*; and as amended in 43 CFR Part 10, Native American Graves Protection and Repatriation Regulations. The NAGPRA mandates that federal land managers consult with federally recognized Indian tribes regarding planned excavations on federal lands and establishes procedures that federal agencies must follow in the event of inadvertent discovery of Native American human remains and cultural items. It is important to note that the NAGPRA applies only to human remains that can be culturally associated with a modern Native American group, and that are not identified as the remains of a historic settler, murder victim, etc. The statute provides a mechanism for determining the disposition of such human remains or cultural items. The NAGPRA also forbids the sale of Native American human remains or of cultural items obtained in violation of the statute.

UMCD shall initiate consultation with the CTUIR, with whom an MOA governing government-to-government relations between the tribes and the Army exists, and which Native American tribal group is recognized as possible aboriginal people culturally affiliated with the lands now occupied by UMCD. In addition, UMCD shall provide a Summary Report, as required by the NAGPRA (Section 6), to the CTUIR.

The purpose of this consultation is to establish UMCD's NAGPRA responsibilities and address installation land management activities that could result in the inadvertent discovery and disinterment of Native American human remains or cultural items, to establish standard consultation procedures, and to provide for the determination of custody, treatment, and disposition of cultural items. UMCD is addressing the NAGPRA, Section 3-related issues on the

installation on a case-by-case basis since no human remains have been found to date. The sections of this SOP describe procedures to be followed in the event of inadvertent discovery of Native American human remains or associated cultural items. Chapter 7.0 of this document presents a Native American consultation management plan.

POLICY

AR 200-4 states that the Installation Commander must ensure that intentional excavation and response to any inadvertent discovery of NAGPRA-related cultural items be carried out in compliance with all applicable statutory and regulatory requirements of the NAGPRA, the ARPA, and the NHPA. Compliance with one statutory requirement, therefore, may not satisfy other applicable requirements. All UMCD activities will strictly avoid the disturbance of human burials, whether marked or unmarked. In all instances where avoidance is not possible, UMCD shall consult, as outlined by the NAGPRA, with the Native American tribes that may be culturally affiliated with the remains or items, on a case-by-case basis. Under no circumstances will any UMCD activity be allowed to proceed if it will intentionally disturb a known burial site until such time as consultation between UMCD and the Native American tribes is completed in accordance with 25 U.S.C. Section 3002(d) Sec. 3. The UMCD TJAG will vigorously enforce the NAGPRA where illegal trafficking in Native American human remains, associated funerary objects, unassociated funerary objects, sacred objects, or objects of cultural patrimony can be proven.

In accordance with 43 CFR Part 10.3 and AR 200-4, the Installation Commander shall take reasonable steps to determine whether a planned activity may result in the intentional excavation or inadvertent discovery of cultural items from UMCD. When it is determined that these cultural items, which are covered under the NAGPRA as determined by UMCD in consultation with Native American representatives, may be encountered and, prior to issuing approval to proceed with the activity, the Installation Commander shall carry out the consultation procedures and planning requirements at 43 CFR Parts 10.3, 10.4, and 10.5 as part of the intentional excavation or inadvertent discovery of cultural items, a written Plan of Action must be prepared in accordance with 43 CFR Part 10.5(e).

If there is no CA in effect that sets forth agreed-upon procedure for inadvertent discovery, the installation must comply with 43 CFR Part 10.4(a-d). Such compliance measures include, but are not limited to, notifications as described below, cessation of the ongoing activity for 30 days in the area of discovery, protection of the discovery, consultation with Native American tribes culturally affiliated with the discovery in accordance with 43 CFR Part 10.5, and preparation of a written Plan of Action. The Installation Commander must ensure that all authorizations to carry out activities on installation lands include a requirement for the holder of the authorization to notify the CRM immediately upon the inadvertent discovery of cultural items and to protect such discoveries until applicable compliance procedures are satisfied (AR 200-4(2-5[d])).

For all activities undertaken on lands managed by UMCD, the general policy shall be strict avoidance of all human burials, whether marked or unmarked, whenever possible.

For all instances where avoidance is not possible, UMCD shall consult, as outlined by NAGPRA, with the Native American tribes that may be culturally affiliated with the remains or items, on a case-by-case basis. Under no circumstances will any activity proceed until consultation between UMCD, the Native American tribes, and any other interested parties is undertaken.

INTENTIONAL ARCHAEOLOGICAL EXCAVATIONS

In accordance with 43 CFR Part 10.3(b) the intentional excavation of human remains, funerary objects, sacred objects, or objects of cultural patrimony from federal or tribal lands (after November 16, 1990) is permitted only if:

- The objects are excavated or removed following the requirements of the ARPA and its implementing regulations
- The objects are excavated after consultation with or, in the case of tribal lands, consent of, the appropriate Native American tribe or Native Hawaiian organization pursuant to Part 10.5
- The disposition of the objects is consistent with their custody as described in Part 10.6

- Proof of the consultation or consent is shown to the federal agency official (i.e., Installation Commander) or other official (CRM) responsible for the issuance of the required permit.

As stated previously in accordance with 43 CFR Part 10.3(c), the Installation Commander must take reasonable steps to determine whether a planned activity may result in the excavation of human remains, funerary objects, sacred objects, or objects of cultural patrimony from federal lands. Any Native American tribe likely to be culturally affiliated with the expected or inadvertently discovered human remains or associated cultural items must be notified.

INADVERTENT DISCOVERY NOTIFICATION PROCEDURES

The UMCD employee or contractor who inadvertently discovers human remains must notify the responsible federal official (i.e., the Installation Commander or CRM, in accordance with 43 CFR Part 10.4(b)). Certification of receipt of notification by the Installation Commander or his/her designated representative (CRM) initiates the 30-day waiting period that must be observed unless a pre-existing CA is in force with the federally recognized Native American tribe(s) who have cultural affiliation with UMCD as established by the U.S. Indian Claim Commission Final Report, 1978.

If the inadvertent discovery occurred in connection with an ongoing activity on UMCD, the person providing the initial notice previously described must stop the activity in the area of the inadvertent discovery and make a reasonable effort to protect the human remains, funerary objects, or objects of cultural patrimony discovered inadvertently.

Upon having received notification of the actual or potential disturbance or the discovery of a human burial site, human remains, or burial goods, UMCD shall, as soon as possible, but no later than 3 working days after receipt of the notification with respect to federal lands described in 43 CFR Part 10.4(b-d):

Take immediate steps, if necessary, to further secure and protect inadvertently discovered human remains, funerary objects, sacred objects, or objects of cultural patrimony, including, as appropriate, stabilization or covering.

Report the receipt of such notification by telephone, with written confirmation, to the appropriate Native American tribe contacts, and the proper Oregon state agencies (Oregon State Museum, Oregon Division of Indian Affairs), as deemed necessary by the UMCD CRM. The notification shall include pertinent information as to kinds of human remains, funerary objects, sacred objects, or objects of cultural patrimony discovered inadvertently, their condition, and the circumstances of their inadvertent discovery. If written notification is provided by certified mail, the return receipt constitutes evidence of the receipt of the written notification by the Native American tribes.

Based upon the information received from the person providing initial notification of the burial discovery, UMCD shall additionally inform the appropriate Oregon state agencies as to the exact location and state (condition) of the human burial site, human remains, or burial goods of which notification was received, for the purpose of obtaining their assistance (through a records search) in the possible identification of the deceased.

In the event that UMCD or appropriate state of Oregon agency (Medical Examiner) duly designated representative have reason to suspect that the burial contains a victim of a recent prosecutable crime or accidental death, the proper military authorities and UMCD TJAG office will be notified.

INADVERTENT DISINTERMENT PROCEDURES

The human burial site or its exposed contents must be initially examined by the UMCD CRM to attempt to determine the lineal descendants (next of kin) or to determine race and age of the remains, if possible, using relevant available and solicited information (e.g., plat, maps, records, interviews with tribal members and landowners knowledgeable of the site in question, associated funerary objects). This initial examination must be conducted in consultation with the Native American tribes.

If a presumption as to Native American lineal descendancy (next of kin), or a determination of race and age can be ascertained based upon location, historical data and any associated funerary objects, this information must be used to determine disposition of the human burial site, human remains, or burial goods by UMCD and the Native American tribes. The human remains and associated burial goods may be further examined within a scope of study developed in consultation with the duly designated Native American tribe representative. Disposition must be in accordance with the NAGPRA and the procedures described herein.

Within a period designated by the NAGPRA from the time UMCD has provided notification to the Native American tribes of the actual or potential disturbance or the discovery of a human burial site, human remains, or burial goods, the UMCD CRM and the Native American tribe representative(s) shall commence initial examination of any culturally affiliated human remains not associated with or suspected of a crime or accidental death, as determined above, which are the subject of the notification, and shall undertake exclusively the following activities:

If it cannot be determined by means of such initial examination that the human remains are either Native American or non-Native American, the proper measures as stated in the NAGPRA will be used to determine cultural affiliation.

If it is determined by initial examination that the human remains are non-Native American and nontribal, the remains will be further examined by the UMCD CRM and the UMCD law enforcement personnel. Further study and final disposition of these remains will be at the discretion of UMCD. The remains will be turned over to the proper legal authorities if it is determined that a recent crime was committed or suspected. Law enforcement and health officials will recover any remains resulting from a recent prosecutable crime or accidental death (i.e., drowning).

REPATRIATION

In accordance with NAGPRA Section 7:

- If, pursuant to Section 5 (of the NAGPRA), the cultural affiliation of Native American human remains and associated funerary objects with a particular Native American tribe is established, UMCD, upon the request of a known lineal descendant of the Native American or of the tribe or organization, shall expeditiously return such remains and associated funerary objects.
- If, pursuant to Section 6, the cultural affiliation with a particular Native American tribe is shown with respect to unassociated funerary objects, sacred objects or objects of cultural patrimony, UMCD, upon the request of the Native American tribe, shall expeditiously return such objects.

The return of cultural items shall be in consultation with the requesting lineal descendant or tribe or organization to determine the place and manner of delivery of such items.

Where cultural affiliation of Native American human remains and funerary objects has not been established in an inventory, upon request, such remains and cultural objects shall be expeditiously returned where the requesting Indian tribe can show cultural affiliation by a preponderance of the evidence based upon *geographical, kinship, biological, archaeological, anthropological, linguistic, folkloric, oral tradition, historical, or other relevant information or expert opinion*.

Sacred objects and objects of cultural patrimony shall be expeditiously returned when:

- The requesting party is the direct lineal descendant of an individual who owned the sacred object.
- The requesting Native American tribe can show that the object was owned or controlled by the tribe or organization.
- The requesting Native American tribe can show that the sacred object was owned or controlled by a member thereof, if there are no identifiable lineal descendants.

In addition, according to the NAGPRA, Section 7, the return of culturally affiliated Native American cultural items to the lineal descendant or Native American tribe will be done so expeditiously unless the items are indispensable for completion of a specific scientific study, the outcome of which would be of major benefit to the United States. The cultural items shall be returned no later than 90 days after the completion date of the scientific study. Also, UMCD shall share what information it does possess regarding the object in question with the known lineal descendant or Indian tribe to assist in making a claim.

Where there are multiple requests for repatriation of any cultural item and, after complying with the requirements of this Act, UMCD cannot clearly determine which requesting party is the most appropriate claimant, UMCD may retain such item until the requesting parties agree upon its disposition or the dispute is resolved pursuant to this Act's provisions or a court of competent jurisdiction.

Any person who fails to make a timely claim prior to the repatriation or transfer of human remains, funerary objects, sacred objects, or objects of cultural patrimony is deemed to have irrevocably waived any right to claim such items pursuant to the regulations or the Act. A "timely claim" means the filing of a written claim with UMCD prior to the time the particular human remains, funerary objects, sacred objects, or objects of cultural patrimony at issue are duly repatriated or disposed of to a claimant by UMCD in accordance with 43 CFR Part 10.

Any person who wishes to contest actions taken by UMCD Indian tribes with respect to the repatriation and disposition of human remains, funerary objects, sacred objects, or objects of cultural patrimony is encouraged to do so through informal negotiations to achieve a fair resolution of the matter. The Review Committee may aid in this regard by facilitating the informal resolution of disputes relating to 43 CFR Part 10. Any recommendation, finding, report, or other action of the Review Committee is advisory only and not binding on any person.

If the cultural affiliation of human remains cannot be established pursuant to these regulations, the human remains must be considered culturally unidentifiable. Museum and Federal agency officials must report the inventory information regarding such human remains in their holdings

to the Departmental Consulting Archeologist who will transmit this information to the Review Committee. The Review Committee is responsible for compiling an inventory of culturally unidentifiable human remains in the possession or control of each museum and federal agency, and, for recommending to the Secretary specific actions for disposition of such human remains.

INADVERTENT DISINTERMENT- RECOVERY, RESTORATION, AND REINTERMENT PROCEDURES

When human remains are not associated with a recent crime and are determined to be culturally affiliated with the Native American tribes, the tribal representative, in consultation with the UMCD CRM, shall make a determination as to whether the burial can be adequately and safely restored and protected in situ or whether, in the alternative, the contents of the burial should be disinterred completely and reinterred in another location. Each restoration and reinterment, as such, shall provide an opportunity for appropriate tribal religious ceremony or ceremonies.

If it is determined, in consultation with the Indian tribe's duly designated representative, that the disturbed burial can be adequately and safely restored and protected in situ, the UMCD CRM shall, as soon as practicable, ensure the burial to be backfilled, stabilized, and protected from further disturbance by the human activities or natural processes that caused the disturbance in the first instance. If feasible, culturally affiliated Native American tribes will be encouraged to participate.

If, on the other hand, it is determined that the in situ restoration of the burial is not feasible, the Native American tribes shall, as soon as practicable and subsequent to the completion of any study conducted on the contents of the burial at the direction of the CRM and pursuant to any existing CA or the law and its governing regulation, cause the disinterred human remains and any and all burial goods to be interred on Native American lands within the boundaries of the appropriate Native American reservation or lands, as determined by the Native American tribes.

UMCD shall reroute construction, to the extent feasible, to leave human remains in place and unharmed. For the purposes of this SOP, a standard avoidance distance of 200 feet around any burial site will be recognized and complied with by UMCD.

Where construction rerouting is not feasible, the CRM, in consultation with the Native American tribe's duly designated representative and the Oregon State Museum, shall remove the remains and associated funerary objects to a safe location for study and preparation for reburial and repatriation, employing standard archaeological field study and recordation procedures and techniques. UMCD may resume construction in the vicinity as soon as the CRM certifies that the remains and burial goods have been properly and safely removed.

CONSULTATION

UMCD will not provide details of any burial disturbance to any public, private, or government media. Upon invitation, UMCD will attend Native American tribal meetings for the purposes of discussing NAGPRA-related issues.

Native American groups and lineal descendants may oppose the display of human remains and cultural items and the publication of information through photographs, informational brochures, or scientific studies. Such concerns may also extend to documentation associated with the human remains and cultural items, as well as excavation records, site maps, and reports.

The manner in which human remains and cultural items are curated and transported for repatriation purposes are important issues that may require consultation with Native Americans. Consultation is particularly important in repatriation cases to ensure respect of cultural traditions and sensitivities. It is important to note that some Native American tribes did not practice reburial of human remains, which has caused a dilemma concerning how to repatriate human remains. However, some Native American tribes have developed policy and procedures for handling repatriation and reburial. The Installation Commander should request information on these policies and procedures before the need for consultation arises.

Reburial of human remains and other cultural items is often the form of treatment for repatriated items that is preferred by Native American tribes, and often reburial is preferred to occur at or near the location (i.e., usually the archaeological site) where the remains were originally excavated. This is an issue for the Installation Commander's decision. Allowing reburial of cultural items repatriated under the NAGPRA on the installation would generate a requirement to

protect the reburial area from damage in perpetuity. Reburial is not specifically required under the NAGPRA; however, it is a means of treatment for repatriated remains that many tribes prefer and the Installation Commander may be faced with such requests upon repatriation.

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5.9.9 Standard Operating Procedure #9

MAINTENANCE, REPAIR, ALTERATION, AND DEMOLITION OF NATIONAL REGISTER-ELIGIBLE OR POTENTIALLY ELIGIBLE HISTORIC BUILDINGS AND STRUCTURES

OVERVIEW

UMCD currently has two buildings (Buildings Nos. 1 and 2) eligible for listing in the National Register. The Oregon SHPO has also indicated that the entirety of UMCD is potentially eligible as a Historic District. However, consultation between UMCD and the Oregon SHPO has not been conducted.

POLICY

Buildings that are eligible or potentially eligible for inclusion in the National Register will be maintained in accordance with the Secretary's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (36 CFR Part 67, Army Historic Buildings Management Standards), and in consultation with the Oregon SHPO.

PROCEDURES

All DPW work orders, maintenance requests, and/or contracts affecting historic buildings as determined by the CRM will be flagged in such a manner as to identify that structure as protected under the NHPA. All Army, contractor, and tenant activities that may result in any physical modification or alteration to eligible or potentially eligible historic buildings are subject to review by the CRM, in consultation with the Oregon SHPO, with the following consideration:

- Maintenance procedures and material replacement must be in accordance with the Secretary's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (36 CFR Part 67).

When maintenance actions potentially affecting historic properties are proposed, the CRM will consult with the SHPO and any other consulting parties. A description of the Proposed Action will be made available to the interested public upon their request.

Notification of proposed Army contractor or tenant actions (undertaking) will be submitted to the SHPO and all consulting parties sufficiently in advance of the project to afford the SHPO 30 calendar days for review and comment. If written concurrence of the SHPO is not received by the CRM within 30 calendar days, UMCD is not required to take any further steps in the Section 106 process.

If the SHPO or any consulting party disagrees with the finding, the CRM will specify reasons for the disagreement and request Council comments, if appropriate. In such instances, the Council has 15 days to respond to the invitation to consult and 45 days to respond with comments. UMCD then proceeds according to Council Comments. If no response is received, concurrence with UMCD is assumed and no further action is required for the no adverse effect undertaking.

In those instances where the Army determines a Proposed Action is necessary to the installation mission or otherwise decides to proceed with an undertaking that will result in an adverse effect to a historic property, the guidance provided in SOP #1 will be followed.

With the exception of World War II temporary buildings (see Appendix K), building demolition is always considered an adverse effect. When demolition of a historic building is planned, the SHPO and, if necessary, the regional offices of the HABS/HAER, shall be consulted for coordination and recommendations regarding appropriate mitigation procedures. In all cases where demolition of a historic building is planned, an MOA should be in effect prior to the initiation of any demolition activity.

5.10 ACTIONS NOT REQUIRING STATE HISTORIC PRESERVATION OFFICER CONSULTATION

At present, UMCD conducts Section 106 consultation with the Oregon SHPO on a case-by-case basis. However, in the future, consultation processes may ultimately determine that there are buildings and/or exclusionary zones (certain areas of the installation that the agencies agree are disturbed to such a degree that there is little potential to affect historic properties, thus requiring no Section 106 review. At that time, those buildings and areas would no longer require input from the Oregon SHPO prior to conducting the undertakings.

The negotiation, execution, and implementation of a PA between the Army and the Oregon SHPO, and the Council, if appropriate, for the continued operation and maintenance of UMCD, should be a future consideration. Such an agreement is suggested by AR 200-4 and will serve to streamline the Section 106 consultation process. Implementation of such a PA would facilitate many of the objectives of compliance. The PA should explicitly identify undertakings, and classes of undertakings, which are to be excluded from routine SHPO review. As intended by AR 200-4, the PA should focus exclusively on NHPA Section 106 consultation procedures and should not stipulate procedures for compliance with Section 110, the NAGPRA, the ARPA, or other laws and regulations.

5.11 CURATION

Any cultural materials collected during archaeological inventory on UMCD must be curated in compliance with 36 CFR Part 79 (*Curation of Federally Owned and Administered Archaeological Collections*) and a curation agreement developed with the selected repository. UMCD may enter into a contract, an MOA, a CA, or an interagency agreement with a curation facility such as a museum, archaeological center, university, or a federal or state agency at any time cultural material may come to be collected. Assistance in arranging a curation agreement and evaluating the appropriateness of a repository should be available from the agency's FPO, the Oregon SHPO, the Oregon State Archaeologist, or the NPS. SOP #7, "Analysis And Curation Of Cultural Materials," outlines procedures for curation.

5.12 REVIEW OF INTEGRATED CULTURAL RESOURCES MANAGEMENT PLANS (ICRMPs)

ICRMPs are developed to cover a 5-year period. In certain cases, the ICRMP should be re-evaluated prior to the 5-year review point to determine if it still meets mission requirements. Some events that may trigger a reevaluation of the ICRMP include:

- Significant federal actions (e.g., change in mission, BRAC)
- Deficiencies resulting from an environmental audit (in accordance with AR 200-1)
- A significant increase in the number or percentage of completed surveys
- Change in or exception to HQDA policy
- New or revised federal statute, regulation, EO, or Presidential Memoranda
- Addition of new resource types or categories (e.g., cantonment area reaches 50-year period or exceptionally important Cold War resources are identified).

External coordination and review of the ICRMP should go through the appropriate chain of command with the review of the ICRMP occurring at HQDA (MACOM).

5.13 CULTURAL RESOURCES MANAGER STAFFING AND TRAINING NEEDS

There is a funded CRM staff position at UMCD. UMCD has approximately 17,054 acres of land that requires full-time attention to cultural resources compliance needs. The CRM (at this writing), although not a qualified archaeologist, can fulfill the needs of qualified personnel to conduct archaeological investigations through contracting services. The CRM should be trained in cultural resources management as completely as possible. Courses in the NAGPRA, Section 106, and other related programs should be sought and if already accomplished, continued with refresher courses and reinforced through attendance of a wide range of meetings of cultural resources managers within DOD.

5.14 UMATILLA CHEMICAL DEPOT KEY OBJECTIVES AND CULTURAL RESOURCES MANAGER GOALS

These objectives and goals are not necessarily in order of preference. Some of the objectives are being met, and some are in the beginning stages but need additional funding and time to complete.

General Goals

- Ensure compliance with federal preservation laws.
- Locate, evaluate, and protect archaeological, historical, and sacred sites.
- Contribute to the regional archaeological and historical body of knowledge.
- Employ efficient techniques for the management of cultural resources.

Specific Goals

- Provide training for CRM and Base Commander on the NAGPRA and Section 106 of the NHPA.
- Provide CRM training to Security Police; develop an installation directive regarding procedures for unexpected cultural resources finds.
- Prepare an implementing EA for the ICRMP
- Complete the Columbia Shrub Step Delineation study to assist with the identification of Native American plant resources.
- Develop an installation instruction for NEPA actions to help protect cultural resources.
- Develop a single, coordinated TCP and Sacred Sites Survey.
- Develop a CA with the CTUIR relative to mutually acceptable methods for the treatment of affiliated cultural materials and sites.
- Conduct an inventory and evaluation of UMCD archaeological resources.
- Conduct a historic buildings and structures inventory that completes the World War II and Cold War evaluation of UMCD.
- Consult with the Oregon SHPO to achieve concurrence on the status of archaeological and architectural properties at UMCD.

- Enter into a PA with the Oregon SHPO as to which buildings and areas at UMCD are determined to be “not eligible,” and therefore do not require consultation with the SHPO relative to future activities and undertakings.

6.0 ECONOMIC ANALYSIS

6.1 PROCEDURE FOR HISTORIC BUILDINGS OR SIGNIFICANT CHARACTER-DEFINING FEATURES SCHEDULED FOR DEMOLITION

AR 200-4 requires that the installation conduct an economic analysis of historic buildings and structures that are being considered for demolition and replacement. Any demolition or disposal action will most likely involve the Public Works. By including the CRM at all scheduling meetings, an opportunity to identify the necessity of economic analysis early in the planning stages of a project will be established, thereby reducing time, frustration, and cost that may be associated with delays and redesigns of projects found to not conform to the Secretary of the Interior's Standards.

The NHPA requires that historic properties be considered for reuse to the maximum extent feasible before considering their disposal. In other words, demolition of significant contributing elements should remain as a last option, only after all other options have been considered, and proven infeasible, including mothballing. The decision to reuse, replace, or demolish a facility needs to be justified with a least cost, life-cycle economic analysis. This same approach should be considered when major character-defining elements (e.g., windows, doors) are replaced with new materials. A number of computer software programs are currently available for this purpose. The AEC and the Construction Engineering Research Laboratory (CERL) have developed a computer-based analysis (Layaway Economic Analysis [LEA]) for buildings that allows the input and manipulation of costs associated with repairs, maintenance, demolition, and replacement of buildings. The LEA tool also has components that allow for adjustments for National Register properties

As a general rule, when the economic analysis demonstrates that rehabilitation costs exceed 70 percent of replacement costs, replacement construction, may be justified. However, the 70-percent value may be exceeded where the significance of a particular historic structure warrants special attention, or if warranted by the life-cycle cost comparisons.

Often overlooked when considering the cost of new construction is the inherent value of existing building elements, such as foundation, footings, exterior walls, floor structure, stairs, and elevator shafts, elements that could add considerable cost in a new structure, often with a reduced expected life. An additional consideration is time. Rehabilitation often results in considerable savings in construction time and can many times be completed at a fraction of the time required for the construction of a new facility of comparable size and complexity.

The architectural quality of materials and that of the overall finished product also has inherent value, as new buildings rarely possess the fine quality elements/features of the historic facilities, elements that may be exploited positively in a market saturated with standard designed facilities. Such inherent values may be calculated by the rent a potential tenant may be willing to pay for the prestige of locating in a National Register-listed building over the current real estate market rate. The value of restoring or rehabilitating an National Register-listed structure outweighs the potential impacts –or disbenefits–of new construction within a Historic District.

The initial cost of buildings is only a fraction of the long-term cost of ownership and operation. The true cost of new construction must include not only the associated labor and materials, but demolition and disposal costs, re-landscaping, cost and associated time for environmental reviews, the long-term costs, the life-cycle costs, utility costs, replacement costs, and other pertinent factors. Generally, replacement costs should not be based on replacement in kind, but on a design that is architecturally compatible with the historic property, unless the feature is critical to the integrity of the historic building or district.

Operating Expenses

These are costs associated with the operation of a building. Included within this category are costs associated with maintenance over the life of the building, utilities, emergency equipment, elevator operation, telephone and other communication, and replacement.

Life Cycle Cost Analysis (LCC)

Life Cycle Cost Analysis allows for the comparison of costs of projects at different times. There are two approaches commonly used for this purpose: the present worth approach and the equivalent uniform annual cost. The former is the sum of all initial and future costs of a project individually converted into their present value equivalents. The latter is the annual total of individual costs converted into their uniform annual costs over the life of the building.

Additionally, in comparing investment alternatives, such as in determining whether or not to pay more initially for a product with a longer life, a savings-investment ratio (SIR) may be used. The SIR formula would be the difference of the LCC of the alternatives over the difference in their initial costs:

$$\text{SIR} = (\text{LCC A} - \text{LCC B}) / (\text{ICST A} - \text{ICST B})$$

Further considerations for such an LCC may have included such things as the inherent benefit of retaining the archaic materials versus the disbenefit of replacements, and the reduction of energy loss for the historic window through the introduction of compatible storm windows or glazing units.

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7.0 NATIVE AMERICAN CONSULTATION MANAGEMENT PLAN

Legal mandates pertaining to Native American cultural resources and religious freedom include the NHPA, the NAGPRA, the NEPA, the ARPA, the AIRFA, and EO 13007. Army regulations and guidelines (AR 200-4 and DA PAM 200-4) call for the development of a plan to involve Native American groups in the compliance process as part of the ICRMP. Although UMCD has undertaken consultation with regional Native American tribes in the past and continues to meet with representatives at intervals, a comprehensive plan is needed to address Native American issues. Two specific concerns are the protection of TCPs, as required by the NHPA, and access to sacred or ceremonial sites, which is guaranteed by the AIRFA and EO 13007. Initial consultation with the appropriate Native American groups should be undertaken to identify all properties and sites within these categories so that the required protection and any additional site-specific access procedures can be developed and implemented (see also Section 2.6.3).

According to an April 24, 1994 “Memorandum for the Heads of Executive Departments and Agencies,” when in consultation with Native American groups, the heads of federal agencies shall utilize a “Government-to-Government Relations” approach. This is applicable when consulting with Native American Tribal Governments and is particularly important when the agency is “... taking actions that affect federally recognized tribal governments.”

7.1 NATIVE AMERICAN GROUPS WITH AN INTEREST IN ACTIVITIES AT UMATILLA CHEMICAL DEPOT

Today, the tribal group with primary interest in UMCD is the CTUIR (see subsection 3.3 and Appendix H). This confederation represents the Cayuse, the Umatilla, and the Walla Walla, each of which occupied eastern Oregon at the time of European contact. What follows is a brief sketch of the confederated tribes, identifying the language, traditional territory, traditional economy, and present-day tribal organization.

The Plateau Peoples (Cayuse, Umatilla, and Walla Walla)

The term “tribe” can be very misleading when applied to the Cayuse, Umatilla, and Walla Walla. Prior to the arrival of the Euro-Americans, what is thought of today as a “tribe” was really nothing more than large groupings of family bands united by subsistence areas, winter gathering sites, and dialect. They frequented the Columbia River and the lower regions of its tributaries (the Umatilla River and Willow Creek), and hunted in the Blue Mountains east of the Columbia. A Sahaptin-speaking peoples, the Umatilla and Walla Walla spoke their own separate Sahaptin dialect, while the Cayuse, in later years, came to speak a dialect of the Nez Perce. Unfortunately, much of these native language dialects has been lost over the decades, with the exception of a very few individuals living on the Umatilla Reservation.

Life for the historic Umatilla, Cayuse, and Walla Walla was centered around food gathering, necessitating seasonal migrations over vast ranges of land. It was the salmon from the Columbia River, however, that was the staple of their diets. During the salmon runs from late spring until well into the fall, the waters gave up their bounty to the tribes—not only salmon, but eels, whitefish, sturgeon, and a variety of other fishes, as well. After the salmon runs, family groups and bands would disperse, following established migration routes, as they gathered roots and berries and hunted elk and deer, all of which were found in abundant supplies in the region. Accordingly, migration routes tended to follow established patterns, with the bands stopping at the same spots year after year and gathering at the same winter sites contiguous to the Columbia River.

Such a mobile lifestyle necessitated a mobile housing unit, and what the Plateau cultures employed was the distinctive “longhouse,” two teepee-like frames connected in the center by a ridgepole. Once erected, the frame was covered in a layer of mats made from tule, rushes, or cattails, with more poles overlaying the mats to keep them in place. Longhouses provided shelter for extended family units and ranged in length from 20 to 150 feet. Teepees were also used, although they didn’t come about until after the introduction of the horse, and like the longhouses were covered in mats. Unlike their plains relatives, the tribes of the Columbia River did not have an abundance of animal hides.

With the introduction of the horse into the region in the earlier part of the 1700s, daily life for the Cayuse, Umatilla, and Walla Walla was greatly changed. Greater mobility expanded their range of accessibility, leading them beyond the Rocky Mountains in search of buffalo on the Great Plains. In turn, the greater reach of migration resulted in evolved forms of art, dress, and dance, and even introduced new and innovative items such as the travois and the parfleche.

Prior to the arrival of the horse, none of the three tribes had individual chiefs or authoritative figures exercising jurisdiction over the group. Instead, each family band would send a representative to the council. The individual representative had no control over the actions of the individuals in his group above and beyond that of persuasion and “jawboning.” Moreover, if a representative, or the members of his band, disagreed with the consensus of the representative body, they merely moved somewhere else, and the issue was thus resolved. With the greater range of mobility afforded by the horse, however, one of the new and innovative ideas adapted from the Eastern Plains culture was that of electing chiefs because of their qualifications and/or warrior skills.

In 1855, The Umatilla Indian Reservation was established by the Stevens Treaty Council, and the three tribes were soon relocated thereon. It is important to note, however, that the idea of “confederation” was as foreign and removed to Cayuse, Umatilla, and Walla Walla sensibilities of the day as the idea of a reservation was. Thus, during the first years, tribal members were not allowed to leave the reservation to hunt and fish, and this, vis-à-vis the crowding together of the three tribes, created much conflict. Ultimately, the U.S. Government replaced traditional headsmen with paid “chiefs,” and this, over the course of time, led to the present-day governmental form of the General Council and the Board of Trustees. The General Council includes any enrolled person of the confederated tribes over the age of 18 years. The General Council holds elections every second year to elect members to the Board of Trustees, which handles all administrative and legal issues involving the tribes.

Today, there are 2,174 members of the CTUIR; membership affords the individual the right to vote and hold office, and allows the person the right to exercise the hunting and fishing rights reserved in the 1855 Treaty. The reservation is also home to approximately 1,000 Indians from

other tribes, such as the Yakama, Warm Springs, and Nez Perce, as well as to nearly 1,700 non-Indians.

7.2 PREVIOUS CONSULTATION PRACTICES AND PROCEDURES

Consultation with the CTUIR has been centered on the establishment of government-to-government relations. They also assisted in the preparation of the Cultural Resources Management Plan (Tetra Tech 2000) by providing ethnographic information on the historical uses of land by their people. The CTUIR has expressed interest in managing the UMCD antelope herd, and in the UMCD demilitarization of chemical weapons program, as it relates to the health and safety of tribal members.

A formal integrated plan for consultation related to TCPs and Sacred Sites, as required by the AR 200-4, has not, as yet, been developed. The CTUIR have gathering rights at UMCD, but they have never exercised them.

7.3 PROTECTION OF TRADITIONAL CULTURAL PROPERTIES

Sections 110 and 106 of the NHPA apply to TCPs as well as to other types of historic properties. Section 101(d)(6) of the NHPA defines a TCP as a historic property that is eligible for inclusion in the National Register because of its traditional religious and cultural importance to a Native American Tribe or Native Hawaiian organization. A TCP may be eligible under Criterion A, association with significant historical events, or Criterion B, association with the lives of significant persons. An archaeological site subject to evaluation under Criterion D may also be identified as a TCP eligible under Criterion A or B. There are some types of TCPs, however, that are not represented by archaeological sites. Although a TCP must be a tangible location, it may be a natural feature of the landscape that has not been subject to cultural modification and is, therefore, not necessarily identified by archaeological surveys. Consultation with the appropriate Native American group is necessary to identify TCPs.

Potential TCPs on UMCD should be identified through consultation with Native American groups in order to comply with Section 110(a)(2)(B) of the NHPA. This section of the Act

requires a federal agency to ensure that “properties under the jurisdiction or control of the agency that are listed in, or may be eligible for, the National Register are managed and maintained in a way that considers the preservation of their historic, architectural, archaeological, and cultural values in compliance with Section 106.”

DA PAM 200-4 outlines the steps for consultation on TCPs. These steps are listed below and then discussed in further detail:

- Identify cultural affiliation
- Initiate consultation
- Provide notification/schedule/response
- Identify TCPs
- Document TCPs
- Conduct site visits.

The first step is to identify the appropriate tribes, including both federally recognized tribes and other groups that may have a cultural affiliation with the lands under the installation’s control. This includes tribes owning lands adjacent to UMCD, tribes who occupied the region in aboriginal times, and tribes with which UMCD has had previous relationships. Ethnohistoric research is usually conducted to identify tribes and potential types of resources (PAM 200-4, VI-3; National Register Bulletin 38). A list of tribes and tribal points of contact (POCs) has been developed by UMCD and is provided in subsection 3.3 and Appendix H.

Consultation must be initiated with the tribal government (i.e., on a government-to-government basis), although other tribal members may eventually be consulted. Written notification consists of a letter to each group requesting information. Adequate time should be allowed for a response, and follow-up notification may be required. The response may consist of a letter or a request for a meeting.

If TCPs are reported to exist, the next step is to identify the locations and document their significance. National Register Bulletin 38 provides guidelines for the identification and evaluation of TCPs. An ethnographer familiar with the tribes may be retained to assist in

eliciting information to identify TCPs and may interview knowledgeable representatives of each group offering information. Because of the sensitive nature of information pertaining to TCPs, when more than one tribe is involved, each is usually consulted separately, and confidentiality of data is maintained. If an ethnographer assists, initial interviews may take place at the individual tribal offices. It is possible that some tribal governments may want to conduct their own interviews with knowledgeable members and submit the information to the agency.

Following the identification and documentation of TCPs through letters, interviews, and/or meetings, site visits are necessary to further document their locations, significance, and physical integrity, and to develop appropriate protective measures.

If a property is to be designated a TCP, documentation must be adequate to support a determination of eligibility for inclusion in the National Register. Two National Register documentation requirements that may be more problematic for TCPs than for archaeological sites are the establishment of property boundaries, which may include unmodified elements of the landscape, and chronology. To adequately document the latter, both the period of significance and the period of traditional use must be determined (DA PAM 200-4, VI-3).

UMCD should prepare a protection plan for any and all TCPs. Prior to finalizing plans and implementing standard protective measures, such as access restrictions, fences, signs, and patrols for the identified TCPs, UMCD should request comments from the tribes who identify the TCPs. The tribes may have requests, such as active participation in monitoring site condition. They may request restrictions on the use of signs or fences to protect sites if the tribe perceives this as an undesirable visual impact.

7.4 ACCESS TO SACRED/CEREMONIAL SITES

AIRFA guarantees Native American traditional religious practitioners access to sacred sites. EO 13007 directs federal agencies to accommodate access to sacred sites and ceremonial use of them by Indian religious practitioners. It also directs the agencies to avoid adversely affecting the physical integrity of sacred sites.

Until access is requested or a site is threatened by an undertaking, a federal agency may be unaware of the existence of sacred sites within its jurisdiction. Information regarding sacred sites may be more difficult to obtain than information regarding TCPs. The information is even more sensitive, and religious practitioners may even keep it secret from other tribal members. The definition of sacred sites in EO 13007, however, requires the tribe or religious representative to inform the agency of the existence of the sacred site. Advance knowledge of the existence and location of sacred sites facilitates arrangements for access when access is requested. It is also necessary for UMCD to know the general locations of all sacred sites in order to provide adequate protection from inadvertent impacts (PAM 200-4, VI-3).

The consultation process for sacred sites is similar to that for TCPs, but it results in an agreement for access. This process involves the following steps:

- Identify cultural affiliation
- Initiate consultation
- Provide notification/schedule/response
- Identify sacred sites
- Document sacred sites
- Conduct site visits.

7.5 DEVELOPMENT OF AN ACCESS AGREEMENT

The identification process for sacred sites differs from that for TCPs; therefore, the POC list in Appendix H may not be adequate for obtaining information about sacred sites. Religious leaders within the tribes may need to provide this information. As in the recommended procedures for TCPs, tribal representatives and religious leaders should not be expected to provide this sensitive information at a meeting where other groups are present. An ethnographer who is known to the tribe may be effective in eliciting this type of information, or the tribal government may prefer to obtain the information from members of the group. The UMCD representative should then visit the area of the sacred site with the Native American leader to confirm the location, assess the condition, and discuss requested access and ceremonial use.

Sacred sites do not require the same type of documentation as TCPs. The Army pamphlet states, “If a site is truly important to the ongoing traditions of a community, a knowledgeable representative of that community should be able to characterize its general location and appearance. Therefore, Army personnel should not generally question a traditional religious leader’s determination that a site is sacred” (PAM 200-4, IV-3.6).

To comply with the requirement to provide access, consultation should address expected frequency and regularity of access requests; size of the group that will need access; UMCD’s requirements for lead time to process access requests; and any special conditions required by UMCD with respect to security or safety during site visits.

7.6 RECOMMENDATIONS FOR A COORDINATED CONSULTATION APPROACH

Army guidelines (DA PAM 200-4) recommend the following steps that may be taken to facilitate consultation:

- Establishment of an ongoing consultation relationship with Native Americans
- Designation of a Coordinator for Native American Affairs
- Incorporation of consultation procedures into existing Army planning and procedural documents.

UMCD has already taken the first steps in establishing a consultation relationship with CTUIR. However, as discussed in Section 7.4, consultation under the NHPA and the NEPA is not restricted to federally recognized tribes. All identifiable groups should be included in consultation efforts in the future, as appropriate.

Recent consultation efforts have been coordinated by the UMCD CRM, who has been appointed as a Liaison for Native American Issues on the part of the installation. In the interest of maintaining a consistent approach to these issues and a continuous relationship with the identified groups, consultation efforts should continue to be coordinated by the Liaison for

Native American Issues. Consultation and agreement documents must, however, be signed by the Depot Commander.

Incorporation of this Native American Consultation Management Plan into the ICRMP is the first step toward incorporating consultation procedures into existing documents that are used by the installation. Consultation to identify TCPs and sacred sites throughout the installation and to develop agreements with the tribes should be undertaken as part of long-range planning. Procedures for protection and access, once agreed upon by the installation and the Native American groups, can then be incorporated into other documents where appropriate.

A single, coordinated TCP and sacred sites study can be undertaken to begin to achieve this goal. Army guidelines (DA PAM 200-4) recommend that consultation to identify both TCPs and sacred sites be undertaken as part of planning efforts, rather than waiting until either access for religious sites is requested by Native Americans or previously unidentified resources are threatened by proposed projects or mission-related activities.

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8.0 PUBLIC INVOLVEMENT PLAN

8.1 PURPOSE OF THE PLAN

The purpose of the Public Involvement Plan section of the ICRMP is to provide an organized, comprehensive approach for incorporating public participation into the cultural resources compliance process at UMCD. The Plan addresses public information needs directly required by, or related to, several cultural resources statutes. These information needs may include legal notices; public meetings; media relations; and notifications to, or discussions with, special interest groups (e.g., Native American tribes), federal agencies, local governments, or interested individuals within the public. The Plan also identifies the formal and informal timing of public involvement activities and the types of individuals essential to the process.

The federal statutes requiring public involvement and/or consultation in the cultural resources compliance process include the NHPA, the NEPA, the NAGPRA, the ARPA, and EO 13007. The AIRFA has no direct requirement for consultation with Native American (or other culturally affected) groups; however, the intent of this statute can be met only through the consultation process and is, therefore, included within this document. Specific guidance for consulting with Native American groups under the NAGPRA, the AIRFA, and EO 13007 is discussed in Chapter 7.0. Guidance for public involvement under the NHPA, the NEPA, and the ARPA is provided in Sections 8.2 through 8.5.

The goal of the public involvement process is to provide adequate opportunity for members of the public to learn about, and provide comment on, cultural resources activities and policies conducted under the jurisdiction of UMCD.

8.2 INDIVIDUALS AND GROUPS INVOLVED

One of the keys to developing an effective cultural resources public involvement process lies in clearly identifying those individuals essential to the process. Although the list will vary depending on the nature of the policy or activity, DOD and civilian individuals and groups that

may be critical to an effective public involvement process at UMCD include (but are not limited to):

- UMCD Installation Commander
- UMCD Staff Judge Advocate
- UMCD Public Affairs Officer
- UMCD Cultural Resources Manager/Liaison for Native American Issues
- UMCD Civilian Executive Assistant (CEA)
- UMCD Natural Resources Managers
- UMCD NEPA Coordinator
- Oregon SHPO
- Council
- National Park Service Consulting Archaeologist
- Keeper of the National Register
- Applicable Cultural Groups (e.g., Native American tribes)
- Local Governments
- Other interested members of the public.

Roles and responsibilities of individuals involved in the public participation process have been discussed in Chapter 5.0.

8.3 TIMING

All of the statutory guidance requiring public involvement to support cultural resources compliance encourages public participation at the earliest possible time. Early coordination helps ensure that planning and decisions reflect cultural resources values, helps avoid possible delays later in the process, helps to identify potential conflicts and find appropriate resolutions, and allows for the widest feasible range of alternative actions to be considered. The NHPA and the ARPA do not provide specific timelines for public involvement activities; the NEPA does have this guidance, however, and that information is provided in subsection 8.4.2.

8.4 STATUTORY GUIDANCE

8.4.1 National Historic Preservation Act (as amended)

Public involvement activities under the NHPA are largely focused within two sections of the Act: Sections 106 and Section 110. Section 110 considers agency responsibilities when identifying, evaluating, nominating, and protecting historic properties and indicates that the agency shall ensure:

. . .that the [agency’s] preservation-related activities are carried out in consultation with other federal, state, and local agencies, Indian tribes, Native Hawaiian organizations carrying out historic preservation planning activities, and with the private sector . . .

The primary focus on public participation under the NHPA is in the Section 106 review process. This section of the Act provides for active participation by the public in various ways, depending on their particular interests. In 1988, the Council issued guidance for public participation under Section 106. Even though the Section 106 process has been revised (effective January 2001), the document entitled *Public Participation in Section 106 Review: A Guide for Agency Officials* is provided in its entirety as Appendix J to this ICRMP. Useful principles of the process include:

- Public participation in Section 106 review should support historic preservation objectives and help the federal agency meet its program responsibilities
- Both federal agencies and members of the public have responsibilities in a public participation program
- Public participation objectives should be approached with flexibility
- The level and type of public participation should be appropriate to the scale and type of undertaking and to the likelihood that historic properties may be present and subject to effect.

To support these principles, the Council’s guidance for public participation informs agency officials about the ways of identifying interested persons and involving them in the review

process, and in evaluating agency public participation programs. Within this framework, the Council recommends that agencies follow the procedures outlined in the following subsections.

8.4.1.1 Determine the Extent of Public Participation Needed.

The initial step in the Section 106 process involves information needs. It is at this point in the process where UMCD should begin to consider public participation. Aspects of the process to consider at this step include:

- Whether or not there are potential public participants (i.e., local governments, Indian tribes, public or private organizations) that might have knowledge of, or concerns with, historic properties in the area
- The level of effect that a project may have on historic properties
- The scale of the project (i.e., whether there are elements of the public that would have no interest in certain types of activities)
- Whether the project is of sufficient magnitude to warrant broad public involvement.

8.4.1.2 Identify Potential Participants.

Through its implementing regulations, the NHPA (36 CFR Part 800.3) directs agencies to seek information from “local governments, Indian tribes, public and private organizations, and other parties likely to have knowledge of, or concerns with, historic properties in the area.” For UMCD, the Oregon SHPO can assist in developing an initial list of such parties, each of whom, when contacted, may be able to identify others. The PAO and CRM at UMCD should also be able to identify potential interested parties. In addition, UMCD should also notify the public that it has initiated Section 106 review. This can be accomplished through articles in local newspapers, media releases, or other appropriate mechanisms (e.g., public meetings).

8.4.1.3 *Seek Information.*

People identified as having particular knowledge or concerns about potentially affected historic properties should be asked to share any information or concerns that they might have. Local governments and historic preservation organizations have official points of contact who may be useful in providing information, and Indian tribes and other types of cultural groups may have traditional leaders who are highly knowledgeable about historic properties in the area. Small public and private organizations, such as local historical societies, museums, universities, and neighborhood organizations often have helpful information as well; however, these types of groups may need assistance in understanding the Section 106 process and how their information can best suit the needs of the project. Examples of individuals or organizations that may be able to assist UMCD during information gathering include: the Oregon Historical Society, the Umatilla County Historical Society; the Tamastlikt Cultural Institute; the Umatilla BLM Archaeologist; Eastern Oregon University; the University of Oregon; each of the tribes listed in subsection 3.3 and Appendix H; and both avocational and professional archaeologists in the Umatilla, northeast Oregon, and southeast Washington areas.

8.4.1.4 *Coordinate with Interested Parties.*

Although the regulations do not stipulate a specific form of coordination with interested persons, the Council recommends that agencies seek their views, particularly when an interested party either has jurisdiction over an area (e.g., a property owner that might be affected by a UMCD activity), or if an interested party is believed to have special knowledge of, or interest in, a particular property (e.g., a local historical society with interest in a potentially historic building).

If no historic properties are found within a project area, the regulations encourage (but do not require) an agency to notify interested persons that no properties have been found. Broad dissemination of “no property” findings is encouraged, because public review may reveal historic properties inadvertently missed in the identification effort and may avoid future project delays.

If historic properties are found within a project area, the agency must consider the effects that might occur to those properties and follow through with the remaining requirements of the Section 106 review process. Documentation of the remaining requirements of Section 106 review must be made available to the public. How the documentation is made available to the public will vary depending upon the scale and nature of the project and may be as simple as making documentary files available for public review. For more complex projects, more active participation between UMCD and the public may be required. This could include formal or informal meetings, telephone conversations, public meetings, exchanges of documents, and/or on-site inspections.

8.4.1.5 Document Public Participation Efforts.

Documenting the public involvement process (typically in a written chronological summary format) allows process reviewers, including federal courts, in the event of litigation, to review the record and determine whether or not an agency has adequately involved the public.

Documentation should be sufficient to answer the following questions:

- What general efforts did the agency make to ensure that the public was aware that the undertaking was being planned, and that Section 106 review was being carried out?
- What particular elements of the public (and why these particular elements) were contacted for information or to identify concerns?
- What groups and individuals were identified as interested persons, and how were they involved in the review process?
- What concerns were identified, and how were they resolved?

The Council encourages maximum public participation in the Section 106 process and promotes full integration of public participation with other agency planning programs. As such, UMCD should ensure that its projects and historic preservation issues are made known to the individuals and organizations discussed within this section; should elicit expressions of public interest, knowledge, and concern regarding any potentially affected historic properties; and, when

possible, should resolve conflicts between UMCD mission requirements and the historic preservation interests of the public.

NHPA guidance leaves the specific means of conducting public involvement to the parties involved, recognizing their ability to structure the process in a way most appropriate to their needs. However, the Council encourages a balanced and fair process, giving full consideration to the views and needs of all parties. Whatever means are employed, all of the participating individuals and groups must be given an opportunity to participate.

NHPA guidance provides no time limit for this portion of the Section 106 process.

8.4.2 National Environmental Policy Act

Under the NEPA, agencies have the responsibility to consider any potential effects that their activities might have on the environment, including historic properties. In many cases, it is an NEPA undertaking that triggers the NHPA's Section 106 review process. As a result, the two Acts are often linked when issues involving cultural resources identification and protection arise. Compliance with one Act does not necessarily satisfy the requirements of the other Act; however, agencies frequently coordinate studies (e.g., surveys to identify historic properties) and solicit public participation to satisfy the needs of both. The timing and interrelationship between the NEPA and Section 106 public involvement efforts include the following elements:

- Consultation with participants for the identification, evaluation, and effect determination on any historic properties can take place concurrent with the development and preparation of NEPA documents (EAs and EISs)
- Draft EAs and EISs can be used as the basis for consultation under the NEPA
- Results of consultation and public participation can be included in the final NEPA document.

Unlike the public involvement processes associated with cultural resources-specific legislation, the NEPA's implementing regulations (40 CFR Part 1500-1508) stipulate formal time lines for

certain types of public coordination and review, and it is during these specified periods that issues related to cultural resources frequently come to light. The critical time periods include:

- The **public scoping period**, which can be appropriate for either an EA or an EIS depending on the scope and magnitude of the project. For an EIS, public scoping meetings are generally held after publishing a “Notice of Intent” (NOI) (to prepare an EIS) in the Federal Register. The public scoping period is approximately 30 days; however, there is no statutory guidance for the duration of this period, and the ending date is generally determined by the agency (i.e., the period is generally of sufficient length to give the public adequate time to provide comment after scoping meetings are held). For particularly controversial projects, early public scoping meetings are sometimes held (i.e., before the NOI release) in order to determine the degree of interest and/or concern by the public.

As a part of the scoping process, agencies are required to invite the participation of affected federal, state, and local agencies; any affected Native American tribes; the proponent of the action; and other interested persons. This can be accomplished by providing public notices of NEPA-related public meetings or hearings and the availability of draft documents. In all cases, agencies must mail notices to those requesting them. Depending on the nature of the action, agencies may also be required to notify Indian tribes, publish notices in newspapers or through other local media, use direct mailings, or post notices on, or off site, where the action will take place.

- The **public comment period** begins on the date that a draft EIS is published. Public hearings to consider comments (agency and public) on the draft are generally held after the draft EIS is published, but not before the public has had an opportunity to review the document for at least 15 days. The public comment period extends for 45 days, during which time public meetings are held to gather public citizen and agency input on the draft document. During this period, no decision on the project can be made.
- The **public review period** occurs after the final EA or EIS is published. For the EA, this is generally a 30-day period, within which the final EA and Finding of No Significant Impact must be available for public review at public libraries or other public information centers. For an EIS, the public review period is also 30 days and begins when the final EIS is filed with the Environmental Protection Agency. This 30-day period allows the

preparing agency and the public to consider the conclusions of the document before the decisionmaker makes a final decision on whether or not to proceed with the project. After the 30-day period ends, a Record of Decision is published that formalizes the decision, as well as any significant factors that were used in the decision process.

8.4.3 Archaeological Resources Protection Act

The ARPA has two fundamental purposes: (1) to protect irreplaceable archaeological resources on public and Native American lands from unauthorized excavation, removal, damage, alteration, or defacement; and (2) to increase communication and the exchange of information among governmental authorities, the professional archaeological community, and private individuals (most particularly those holding private archaeological collections). As a result, the ARPA encourages the establishment of a program to increase public awareness of the significance of, and the need to protect, archaeological resources on installations. Public awareness for these kinds of issues can be accomplished through the types of public outreach activities described in Section 8.5, through public service information seminars (e.g., UMCD staff as guest speakers to local archaeological societies and citizens groups), and through active participation in programs such as Oregon Archaeology Week.

8.5 PUBLIC OUTREACH

8.5.1 Tours and Other Outreach Gatherings

Due to personnel and funding constraints, UMCD does not promote Historic Preservation Week or Oregon Archaeology Week. However, UMCD has hosted a few public outreach events designed to foster a sense of community and encourage a strong relationship between the installation and groups and individuals within the local area. These have included Armed Forces Day, Earth Day, Pioneer Days, and Federal Facilities Day. Armed Forces Day is an annual event providing visitors with the opportunity to learn about UMCD and its past, present, and future missions. Among the activities are armored personnel carrier rides (Umatilla Chemical Depot/ Umatilla Chemical Agent Disposal Facility, June 28, 2000). As a continuing celebration of Earth Day, UMCD recently hosted local students in math, science, and chemistry—the focus was on environmental protection and the safe storage and disposal of chemical weapons. UMCD also hosted the Troop 679 Boy Scouts for various activities on the Depot. Past activities

included campouts, orienteering courses, and first aid classes (Umatilla Chemical Depot/ Umatilla Chemical Agent Disposal Facility, June 28, 2000).

UMCD is unable to provide a great deal of opportunity for public access because of the sensitive nature of its mission, which necessitates its status as a “closed” facility. However, UMCD is open to the public every Thursday (with some areas off limits). Tours of the installation are provided by the UMCD Public Outreach Office, and a display trailer is available. Tours generally focus on ordnance activities and personal protective equipment.

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10.0 GLOSSARY

Biome. An extensive community of plants and animals whose makeup is determined by climatic and soil conditions.

Forbs. A broad-leaved plant that flowers, as distinguished from the grasses, sedges, etc.

Fossil. The remains of long-dead plants and animals that have escaped the decaying process and have, after many years, become part of the Earth's crust. A fossil may be the preserved remains of the organism itself, the impression of it in the sediment, or made by it in life (known as a trace fossil). For fossilization to occur, rapid burial, usually by waterborne sediment, is required. This is followed by chemical alteration, where minerals may be added or removed. If this process does not occur, an organism may, by some other means, be temporarily preserved, but not fossilized (Walker and Ward 1992).

Lacustrine. Formed in, found in, or having to do with lakes.

Lithic. Of stone.

Pleistocene. Of the first epoch of the Quaternary Period in the Cenozoic Era, characterized by the spreading and recession of continental ice sheets and by the appearance of modern man.

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