DOE/EA-1412

Environmental Assessment

Expansion of the Volpentest Hazardous Materials Management and Emergency Response Training and Education Center, Hanford Site, Richland, Washington

U.S. Department of Energy
Richland, Washington

November 2002

ENVIRONMENTAL ASSESSMENT

FOR

EXPANSION OF THE

VOLPENTEST HAZARDOUS MATERIALS MANAGEMENT AND EMERGENCY RESPONSE

TRAINING AND EDUCATION CENTER

HANFORD SITE, RICHLAND, WASHINGTON

U.S. DEPARTMENT OF ENERGY

RICHLAND, WASHINGTON

November 2002

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PREFACE

This environmental assessment is prepared to assess potential environmental impacts associated with the proposed action to expand the Volpentest Hazardous Materials Management and Emergency Response (HAMMER) Training and Education Center to include: an emergency vehicle operations course and the National Utility Training Services site. The impacts of the adjacent Cold Test Facility (CTF) are included for completeness, although the CTF is not part of the HAMMER facility. The remaining area being evaluated is reserved for future uses. Information contained herein will be used by the Manager, U.S. Department of Energy, Richland Operations Office, to determine if the Proposed Action is a major federal action significantly affecting the quality of the human environment. If the Proposed Action is determined to be major and with significant impacts, an environmental impact statement will be prepared. If the Proposed Action is determined not to be major and with significant impacts, a Finding of No Significant Impact will be issued and the action may proceed. Criteria used to evaluate significance are found in Title 40, Code of Federal Regulations 1508.27.

This environmental assessment is prepared in compliance with the *National Environmental Policy Act of 1969*, as amended, the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the *National Environmental Policy Act* (Title 40, Code of Federal Regulations 1500-1508), and the U.S. Department of Energy Implementing Procedures for the *National Environmental Policy Act* (Title 10, Code of Federal Regulations 1021).

The following is a description of each section of this environmental assessment.

1.0 Purpose and Need for Action. This section provides a brief statement concerning the problem or opportunity the U.S. Department of Energy, Richland Operations Office, is addressing with the Proposed Action. Background information is provided.

2.0 Description of the Proposed Action. This section provides a description of the Proposed Action with sufficient detail to identify potential environmental impacts.

3.0 Alternatives to the Proposed Action. This section describes reasonable alternative actions to the Proposed Action, which address the Purpose and Need. A No Action Alternative, as required by Title 10, Code of Federal Regulations 1021, also is described.

4.0 Affected Environment. This section provides a brief description of the locale in which the Proposed Action would take place.

5.0 Environmental Impacts. This section describes the range of environmental impacts, beneficial and adverse, of the Proposed Action. Impacts of alternatives briefly are discussed.

6.0 Permits and Regulatory Requirements. This section provides a brief description of permits and regulatory requirements for the Proposed Action.

7.0 Organizations Consulted. This section lists any outside groups, agencies, or individuals contacted as part of the environmental assessment preparation and/or review.

8.0 References. This section provides a list of documents used to contribute information or data in preparation of this environmental assessment.

Appendices. Additional information necessary to support an understanding of the Proposed Action, alternatives, and potential impacts is provided.

GLOSSARY

BPA	Bonneville Power Administration
CTF	Cold Test Facility
CY	calendar year
DOE	U.S. Department of Energy
DOE-ORP	U.S. Department of Energy, Office of River Protection
DOE-RL	U.S. Department of Energy, Richland Operations Office
DST	double-shell tank
EA	environmental assessment
EPA	U.S. Environmental Protection Agency
EVOC	Emergency Vehicle Operation Course
FONSI	finding of no significant impact
ft^3	cubic feet
HAMMER	Volpentest Hazardous Materials Management and Emergency Response Training and Education Center
LESTC	Law Enforcement and Security Training Center
m^3	cubic meters
mg/m^3	milligrams per cubic meter
NEPA	*National Environmental Policy Act of 1969*
NUTS	National Utility Training Services
NWPPA	Northwest Public Power Association
PSD	prevention of significant deterioration
PUD	public utility district
RPP	River Protection Project
SST	single-shell tank
WAC	Washington Administrative Code

METRIC CONVERSION CHART

Into metric units | Out of metric units

If you know	Multiply by	To get	If you know	Multiply by	To get
Length			**Length**		
inches	25.40	millimeters	millimeters	0.03937	inches
inches	2.54	centimeters	centimeters	0.393701	inches
feet	0.3048	meters	meters	3.28084	feet
yards	0.9144	meters	meters	1.0936	yards
miles (statute)	1.60934	kilometers	kilometers	0.62137	miles (statute)
Area			**Area**		
square inches	6.4516	square centimeters	square centimeters	0.155	square inches
square feet	0.09290304	square meters	square meters	10.7639	square feet
square yards	0.8361274	square meters	square meters	1.19599	square yards
square miles	2.59	square kilometers	square kilometers	0.386102	square miles
acres	0.404687	hectares	hectares	2.47104	acres
Mass (weight)			**Mass (weight)**		
ounces (avoir)	28.34952	grams	grams	0.035274	ounces (avoir)
pounds	0.45359237	kilograms	kilograms	2.204623	pounds (avoir)
tons (short)	0.9071847	tons (metric)	tons (metric)	1.1023	tons (short)
Volume			**Volume**		
ounces (U.S., liquid)	29.57353	milliliters	milliliters	0.033814	ounces (U.S., liquid)
quarts (U.S., liquid)	0.9463529	liters	liters	1.0567	quarts (U.S., liquid)
gallons (U.S., liquid)	3.7854	liters	liters	0.26417	gallons (U.S., liquid)
cubic feet	0.02831685	cubic meters	cubic meters	35.3147	cubic feet
cubic yards	0.7645549	cubic meters	cubic meters	1.308	cubic yards
Temperature			**Temperature**		
Fahrenheit	subtract 32 then multiply by 5/9ths	Celsius	Celsius	multiply by 9/5ths, then add 32	Fahrenheit
Energy			**Energy**		
kilowatt hour	3,412	British thermal unit	British thermal unit	0.000293	kilowatt hour
kilowatt	0.94782	British thermal unit per second	British thermal unit per second	1.055	kilowatt
Force/Pressure			**Force/Pressure**		
pounds (force) per square inch	6.894757	kilopascals	kilopascals	0.14504	pounds per square inch

06/2001

Source: *Engineering Unit Conversions*, M. R. Lindeburg, PE., Third Ed., 1990, Professional Publications, Inc., Belmont, California.

1.0 PURPOSE AND NEED FOR ACTION

The following sections describe the purpose and need and provide background information for this environmental assessment (EA).

1.1 PURPOSE AND NEED

The U.S. Department of Energy, Richland Operation Office (DOE-RL) needs to provide cost-effective, additional personal protection and public safety through expanding training and equipment testing facilities at the Volpentest Hazardous Materials Management and Emergency Response Training and Education Center (HAMMER) on the Hanford Site.

1.2 BACKGROUND

Currently HAMMER, which began operation in September 1997, provides training for both radioactive and chemical hazardous response, firefighting, law enforcement, and occupational, safety, and health training (Figure 1). The mission for HAMMER is to host, broker, and provide training with its partners, involving the hands-on use of realistic props and settings to save lives and reduce injuries, increase personnel productivity, and serve as a catalyst for a regional training industry.

HAMMER began as a local community initiative based on the concept that one training center could serve both the Hanford Site and the region. From that beginning, HAMMER has grown to a national training resource and is well known for its unique partnering approach, its training facility, and its realistic props and simulations.

The original HAMMER was completed in June 1997 on 80 acres (32.3 hectares) of the original 120-acre (48.6-hectares) site. The remaining 40 acres (16.2 hectares) were reserved for future expansion. The existing 10,000-acre (4,047-hectare) Hanford Patrol Academy located immediately north of HAMMER was merged into HAMMER in September 1998. That portion was rededicated as the Law Enforcement and Security Training Center (LESTC). HAMMER operates LESTC in conjunction with the Hanford Patrol. LESTC also is available for use by outside agencies for training purposes. LESTC encompasses approximately 10,000 acres (4,047 hectares), which includes the current firing range and safety zones.

HAMMER currently consists of an administration and classroom building, burn house with computerized burn system, training support building, a number of large training pads for craft-specific and fire training, stream and pond, training tower, aboveground pipelines, various transportation props, a remediation/characterization site, confined space prop, simulated buried waste site, and a junction/diversion box with simulated tank prop.

1.2.1 Emergency Vehicle Operations Course

The Emergency Vehicle Operations Course (EVOC) had been located on Port of Benton land at the old bus parking lot located north of the 1163 Building (the warehouse located at 2355 Stevens.) Recently, this space was leased to a commercial company. EVOC has suspended operations pending availability of a new site.

1.2.2 National Utility Training Services Site

The Northwest Public Power Association (NWPPA) is a non-profit association that has created partnerships with Bonneville Power Administration (BPA) and approximately 200 public utilities, including four local public utilities [Benton Public Utility District (PUD), Franklin PUD, City of Richland, and Douglas PUD], for the purpose of providing education and training services. The goal of NWPPA is to establish National Utility Training Services (NUTS) as a state-of-the-art training facility for line, substation, meter, and relay personnel, along with electricians, engineers, and office personnel.

The NWPPA would offer training through its NUTS site. The NUTS site would provide hands-on training for utility personnel throughout the western United States without jeopardizing power reliability or endangering personnel and equipment. Through the combined efforts of the NWPPA and its partners, the NUTS site would provide continuing education and state-of-the-art training to all utility personnel from entry level to journeymen.

The NUTS site consists of 80 acres (32.4 hectares) for use in connection with training equipment. Ownership of this 80 acres (32.4 hectares) is being transferred to the NWPPA. In addition, DOE-RL has granted an easement for road and utility access across an approximate 4-acre (1.6-hectare) parcel of land immediately south and between the property and Horn Rapids Road. This easement has been covered by other *National Environmental Policy Act* (NEPA) *of 1969* documentation.

1.2.3 Cold Test Facility

The U.S. Department of Energy, Office of River Protection (DOE-ORP) has established the River Protection Project (RPP) with the mandate to remediate and close the Manhattan Project and Cold War legacy waste tanks located on the Hanford Site (RPP-7502). Central to achieving this mandate would be the safe retrieval and transfer of the contents of these waste tanks. Retrieval and transfer systems must accommodate the difficult physical characteristics and hazardous nature of the contents. The newly constructed Cold Test Facility (CTF) adjacent to HAMMER provides a facility for testing of tank waste retrieval, transfer, and sampling hardware to be procured by the Single-Shell Tank Closure Project and the Double-Shell Tank Waste Delivery Project with nonhazardous materials. The construction and operation of CTF has been evaluated under separate NEPA documentation. Potential impacts of habitat mitigation for CTF are discussed in this EA for completeness.

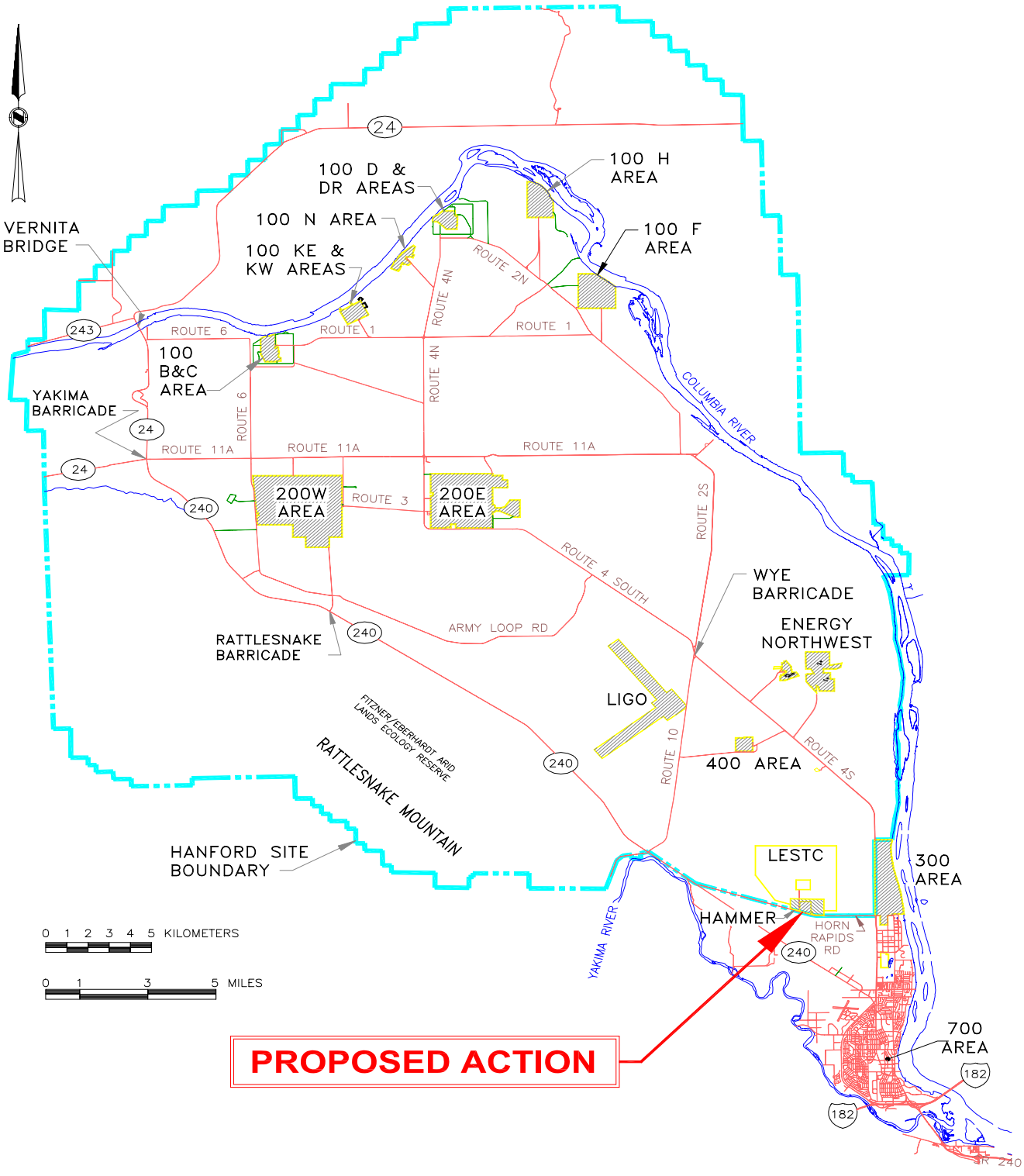

Figure 1. Hanford Site.

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2.0 DESCRIPTION OF THE PROPOSED ACTION

The proposed action would include constructing and operating the EVOC, which would be located on approximately 60 acres (24.2 hectares); expanding, operating, and transferring ownership of NUTS, which is located on approximately 80 acres (32.3 hectares) [40 acres (16.2 hectares) from the original HAMMER footprint and 40 additional acres (16.2 hectares) from the expansion]; and reserving the remaining space [approximately 92 acres (37.2 hectares)] north of the original HAMMER, NUTS, and the CTF (Figure 2) and south of the BPA power lines for future development. EVOC would provide training to emergency service personnel when driving in emergency response situations. NUTS would provide training for utility personnel.

2.1 Emergency Vehicle Operations Course

EVOC (Figure 3) would be located on the approximate 60-acre (24.2-hectare) section to the west of Ila Lane and north of Horn Rapids Road. EVOC would consist of an asphalt course approximately 36 feet (11 meters) wide and 1 mile (1.6 kilometer) long. The course would include a quarter mile (0.4 kilometer) straightaway, a 180-degree corner, and a serpentine of several more turns of varying degrees and radii. The straightaway would be level while the rest of the course would follow approximately the natural elevations of the land. In addition to the asphalt course, a 1,600 square foot (148.6 square meter) asphalt pad would be constructed as a skills course for low speed vehicle maneuvers. A parking area, connex box pad, and shelter area pad also would be constructed at the entrance to the course. The parking area would be approximately 12,500 square feet (1,161 square meter), and the connex box and shelter area pads would be approximately 1,500 square feet (139 square meters) and 600 square feet (55.7 square meters) respectively.

2.2 National Utility Training Services Site

Title to the 80 acres (32.3 hectares) NUTS site (Figure 4) would be transferred to the Department of Education. In a separate action, the Department of Education will transfer this land to the NWPPA. The NUTS site would have properly positioned spans of both wooden and steel transmission lines with room for erecting and dismantling. An area would be used for a helipad, a parking garage for equipment, and an expanded area for earthmoving training.

2.3 Areas Reserved for Future Development

Approximately 92 acres (37.2 hectares) are reserved for future development and would be addressed under a future NEPA review once plans have been developed. These areas are located to the north of the original HAMMER and to the north of the CTF and south of the BPA power lines (Figure 2).

2.4 Environmental Information

A Cultural Resources Review (Appendix A) and a Biological Review (Appendix B) have been prepared for the proposed action.

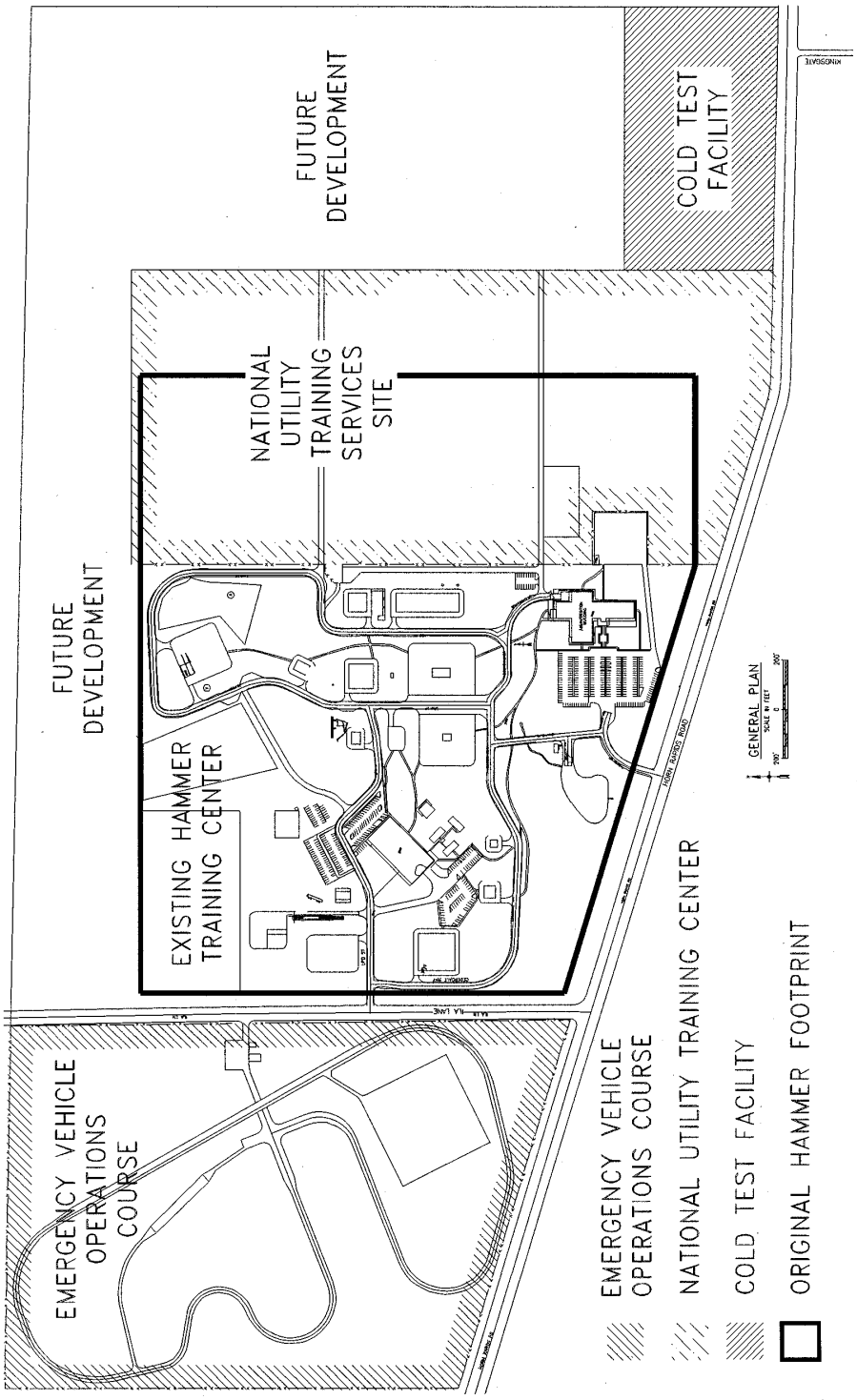

Figure 2. HAMMER.

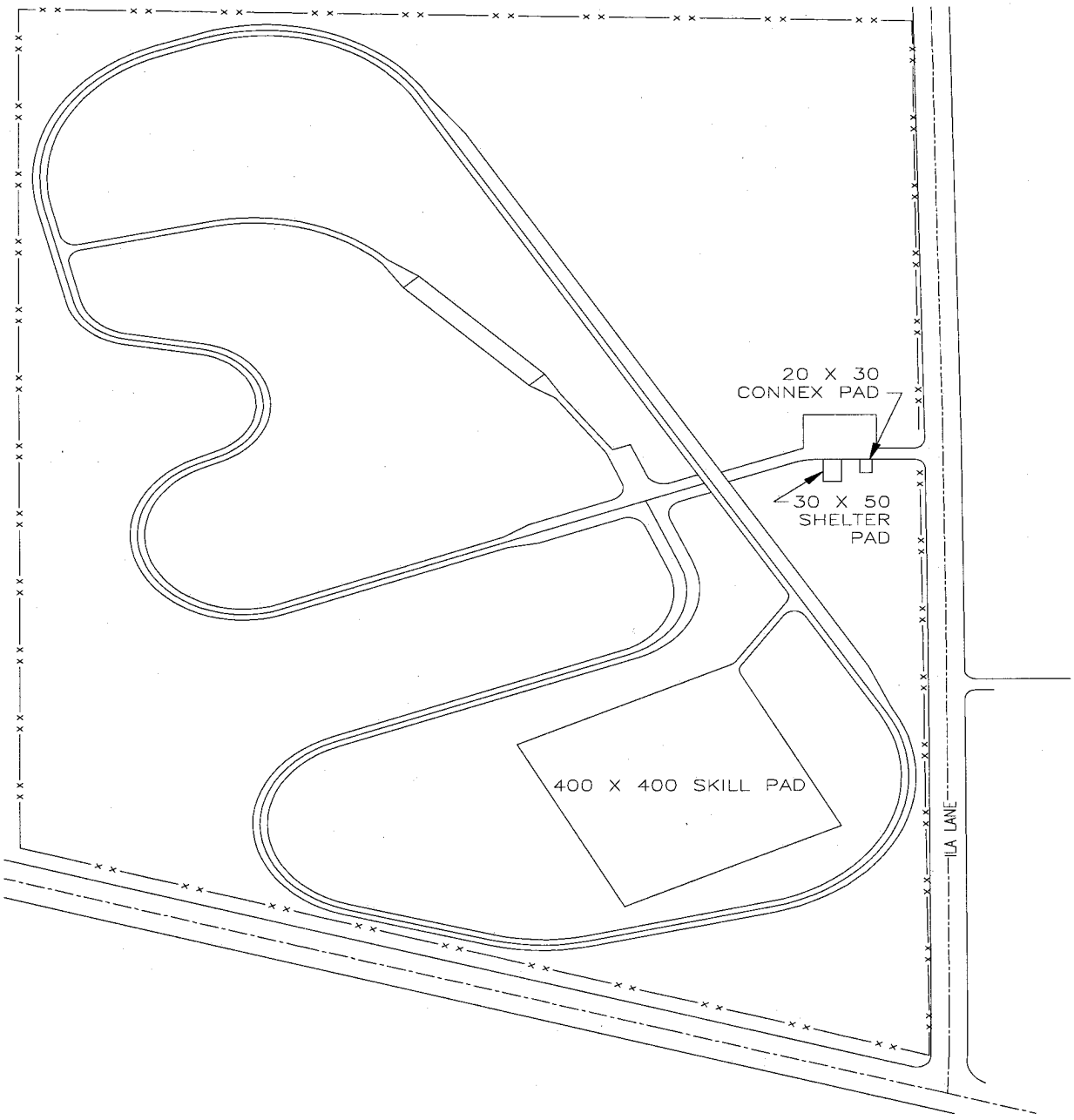

Figure 3. Emergency Vehicle Operation Course.

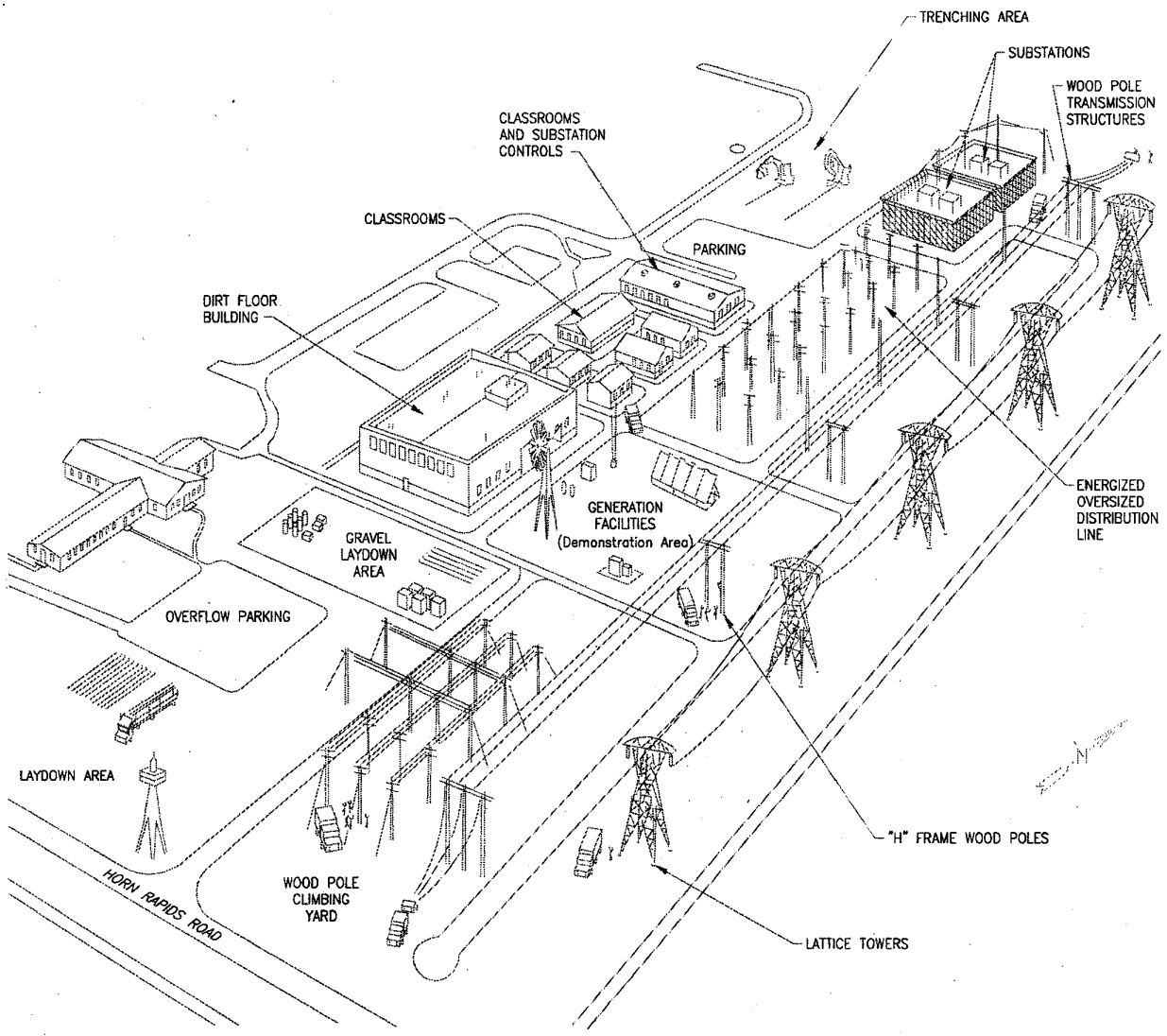

Figure 4. National Utility Training Services Site (Conceptual).

3.0 ALTERNATIVES TO THE PROPOSED ACTION

Alternatives to the proposed action are discussed, but not analyzed fully, in the following sections.

3.1 NO ACTION ALTERNATIVE

The no action alternative to the proposed action is discussed for each proposed project.

3.1.1 Emergency Vehicle Operations Course

The no action alternative would mean that the EVOC would not be built at HAMMER.

3.1.2 National Utility Training Services Site

The no action alternative would mean that the NUTS site would not be expanded beyond the current size of 40 acres (16.2 hectares).

3.1.3 Areas Reserved for Future Development

The no action alternative would result in these areas remaining undeveloped and not specified for future expansion.

3.2 OTHER ALTERNATIVES

Other alternatives to the proposed action are described in the following sections.

3.2.1 Emergency Vehicle Operation Course

Relocation of the EVOC to another location was considered. The type of location feasible for the EVOC could be an unused parking lot located off the Hanford Site.

3.2.2 National Utility Training Services Site

The use of existing training facilities or other locations for the NUTS Facility were considered. A training facility at Camp Rilea near Aberdeen, Oregon, is located on 5 acres. The primary use of Camp Rilea is as a National Guard Camp and the utility training is considered a secondary use. Available land near the I-5 corridor was also considered, as was land near the HAMMER Facility that is zoned for an industrial park.

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4.0 AFFECTED ENVIRONMENT

The following sections provide a discussion of the existing environment that would be affected by the proposed action and alternatives.

4.1 GENERAL HANFORD SITE ENVIRONMENT

The Hanford Site, about 586 square miles (1,517 square kilometers), is located in southeastern Washington State in a semiarid region with rolling topography. Two topographical features dominate the landscape: Rattlesnake Mountain located on the southwest boundary and Gable Mountain located on the northern portion. The Columbia River flows through the northern part and forms part of the eastern boundary of the Hanford Site. Areas adjacent to the Hanford Site primarily are agricultural lands. .

Designations for land use on the Hanford Site for the next 50 years were established in DOE/EIS-0222-F. These designations include preservation, conservation, industrial, and research and development. On June 9, 2000, the Hanford Reach National Monument was established (65 FR 37253) covering 195,000 acres (78,900 hectares). The Hanford Reach National Monument incorporates a portion of the Columbia River corridor, the Fitzner-Eberhardt Arid Lands Ecology Reserve to the south and west, the Wahluke Slope, and the McGee Ranch area. Establishment of the monument recognizes the unique character and biological diversity of the Hanford area, as well as its geological, paleontological, historic, cultural, and archaeological importance.

The Hanford Site has a mild climate with 6 to 7 inches (15 to 18 centimeters) of annual precipitation, with most of the precipitation taking place during the winter months. Temperature ranges of daily maximum temperatures vary from 36°F (2°C) in early January to 95°F (35°C) in late July. Monthly average wind speeds are lowest during the winter months, averaging 6 to 7 miles (10 to 11 kilometers) per hour, and highest during the summer, averaging 8 to 10 miles (14 to 16 kilometers) per hour (PNNL-6415). Tornadoes are extremely rare in the region surrounding the Hanford Site.

During calendar year (CY) 2000, Hanford Site air emissions remained below all established limits set for regulated air pollutants (PNNL-13487). Atmospheric dispersion conditions of the area vary between summer and winter months. The summer months generally have good air mixing characteristics. If the prevailing winds from the northwest are light, less favorable dispersion conditions might occur. Occasional periods of poor dispersion conditions occur during the winter months.

On June 27, 2000, a fire known as the 24 Command Fire, spread rapidly and eventually consumed 163,884 acres (66,322 hectares) of federal, state, and private lands. A total of 60,254 acres (24,384 hectares) within the Hanford Site burned, including areas in and around the HAMMER expansion. Fire suppression impacts included construction of 41 miles (66 kilometers) of bulldozed fire lines, widened dirt roads, and cut fences (DOI 2000).

The vegetation on the Hanford Site is a shrub-steppe community of sagebrush and rabbitbrush with an understory consisting primarily of cheatgrass and Sandberg's bluegrass. The typical insects, small birds, mammals, and reptiles common to the Hanford Site can be found on HAMMER (PNNL-6415). Relatively undisturbed areas of the mature shrub-steppe vegetation are high quality habitat for many plants and animals and have been designated as "priority habitat" by Washington State.

Most mammal species known to inhabit the Hanford Site are small, nocturnal creatures, primarily pocket mice and jackrabbits. Large mammals found on the Hanford Site are deer and elk, although the elk exist almost entirely on the Fitzner-Eberhardt Arid Lands Ecology Reserve. Coyotes and raptors are the primary predators. Several species of small birds nest in the steppe vegetation. Semiannual peaks in avian variety and abundance occur during migration seasons. Additional information concerning the Hanford Site can be found in PNNL-6415.

DOE-RL and its contractors dominate the local employment picture with almost one-quarter of the total nonagricultural jobs in Benton and Franklin Counties. Ninety-three percent of Hanford Site personnel reside in the Benton and Franklin County areas. Therefore, work activities on the Hanford Site play an important role in the socioeconomics of the Tri-Cities (Richland, Pasco, and Kennewick) and other parts of Benton and Franklin Counties (PNNL-6415). Other counties are less affected by changes in Hanford Site employment.

4.2 SPECIFIC SITE ENVIRONMENT

HAMMER is adjacent to the city limits of Richland, Washington, and on the north side of Horn Rapids Road about 3 miles (4.8 kilometers) from the Columbia River, and is above the 100-year floodplain, and has no identified wetlands.

4.2.1 Soil and Subsurface

The soil of HAMMER expansion area is predominately coarse brown-to-grayish-brown sand, and found under grass, sagebrush, and hopsage in coarse sandy alluvial deposits mantled by wind-blown sand. The geologic strata under the surface layer, in descending order, are Holocene eolian deposits, Hanford formation, Ringold Formation, and the Columbia River Basalt Group. The eolian sands are fine- to coarse-grained, and relatively quartz- and feldspar-rich. Deposits of the Hanford formation underlie the eolian deposits. Deposits typical of the gravel-dominated facies consisting of uncemented granule to cobble gravels and minor coarse-grained sand generally dominate Hanford formation strata. The top of the Ringold Formation underlies this. Basalt flows of the Columbia River Basalt Group and intercalated sediments of the Ellensburg Formation underlie the Ringold Formation. The region is categorized as one of low to moderate seismicity (PNNL-6415).

4.2.2 Hydrology

The water table in the HAMMER expansion area is approximately 374 feet (114 meters) to 387 feet (118 meters) below the surface (PNNL-6415).

4.2.3 Air Resources

The Hanford Site operates under a Prevention of Significant Deterioration (PSD) permit established by the U.S. Environmental Protection Agency (EPA), which is designed to protect existing ambient air quality. Except for automobiles and trucks, there are no discharge points for air pollutants at HAMMER.

4.2.4 Plants and Animals

An updated Hanford Biological Review [ERC #2001-600-030-B (Appendix. B)] was conducted for the proposed action. Much of the expansion area was burned during the 24 Command Fire in June 2000, resulting in a substantial reduction in the proportion of shrub cover present. The burned area is now dominated by cheatgrass (*Bromus tectorum*) and Sandberg's bluegrass (*Poa secunda*). A relatively high diversity of forbs and some sprouting bitterbrush (*Pursia tridentate*) also are present. The small unburned, remaining portions of the expansion area contain mature shrubs including big sage (*Artemisia tridentate*), bitterbrush, and snow buckwheat (*Eriogonum niveum*).

Three burrowing owls (*Athene cunicularia*) were flushed and a single active burrow was located. Three western meadowlarks (*Sturnella neglecta*), one loggerhead shrike (*Lanius ludovicianus*), and one horned lark (*Eremophila alperstris*) also were observed in the expansion area. No plant or animal species protected under the *Endangered Species Act* (ESA) *of 1973*, were observed in the vicinity of the proposed action.

4.2.5 Cultural Resources

A Hanford Cultural Resources Review [#2001-600-030 (Appendix A)] was conducted for the proposed action. The review concluded that, "…. no historic properties will be adversely affected by this undertaking, provided the project maintain a 100 meter buffer between project ground disturbing activities and the Yakima Irrigation ditch. Since the project area is located in undisturbed ground, a slight potential exists for historic properties to be located below ground in the vicinity of the Yakima Irrigation Ditch. On August 12, 2001, the State Historical Preservation Officer (SHPO) concurred (Appendix A) with this review.

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5.0 ENVIRONMENTAL IMPACTS

The following sections describe impacts from the proposed action. Impacts from the adjacent CTF are included for completeness.

5.1 CONSTRUCTION PHASE IMPACTS

Impacts from the construction phase activities are described in the following sections.

5.1.1 Soil or Subsurface Disturbance

Emergency Vehicle Operations Course

Construction of the EVOC would disturb previously undisturbed soil. The straightaway portion would require grading to level the length. The rest of the course would follow the contours of the land, except in places that require cut and fill to follow good engineering practices in designing the course. Suitable grading would occur to allow run-off drainage. In total, approximately 75% of the 60-acre (24.3-hectare) site would be disturbed during construction. However after construction, approximately 40 percent of the site would be covered with the asphalt course, skills pad, parking lot, connex box pad, and shelter pad. All soil disturbance activities would be temporary. Portions of the infield and other areas would be reseeded with native species in accordance with the mitigation action plan located in Appendix C.

National Utility Training Services Site

Soil disturbances for the poles and erected tower structures would occur. The helipad would disturb approximately 100 square feet (9.3 square meters) of pavement with an additional perimeter area of 100 feet (31 meters) for a total of 44,100 square feet (4,097 square meters). Suitable grading would occur to allow run-off drainage. The earthmoving training area would occupy approximately 4 acres (1.6 hectares) and the parking garage would disturb approximately 60,000 square feet (5,574 square meters) of soil. It is estimated that 50 percent of the 40-acre (1.62-hectare) expansion area would be disturbed. All soil disturbance activities would be of limited duration, except in the earth moving area.

Cold Test Facility

Construction of the CTF has been completed.

5.1.2 Liquid Discharges to the Groundwater or Surface Waters

It is not expected that any liquid discharges would be made to the groundwater or surface waters from the construction phase.

5.1.3 Gaseous, Particulate, or Thermal Discharges to the Air

Small quantities of gaseous, particulate, or thermal discharges from typical construction activities, such as trucks for transporting building materials and solid waste, heat and exhaust fumes from construction

equipment motors, or backfilling, could be generated for short periods of time during the construction phase for each site of the proposed action. Watering down soil would control dust emissions.

5.1.4 Radionuclide Releases or Direct Radiation Exposure

Because HAMMER is a nonradiation facility and the three projects described in this EA also are nonradiation projects, there would be no radionuclide releases or direct radiation exposure.

5.1.5 Nonhazardous Solid Waste Generated

It is expected that only small amounts of nonhazardous solid waste would be generated during the construction phase. The addition of nonhazardous waste into an onsite landfill would be small compared to the expected overall waste disposal capacity on the Hanford Site. In addition, other facilities would be expected to have adequate capacity to accept all other waste volumes from the proposed action. All nonhazardous waste would be disposed in accordance with applicable requirements.

5.1.6 Hazardous or Dangerous Waste Generated

Small amounts of potential hazardous/dangerous waste (e.g., solvents) might be expected to be generated during construction. This waste, if generated, would be managed and disposed in accordance with applicable federal and state regulations. Waste that might be generated from the proposed action is expected to be minimal compared to annual waste generation on the Hanford Site.

5.1.7 Hazardous Substances Present

It is not expected that there would be any hazardous substances present during construction of the proposed action.

5.1.8 Disturbance to Previously Undeveloped Areas

The relatively high diversity of forbs and residual sprouting of bitterbrush following the fire indicates the area is recovering from the fire. The nature of the firefighting activity during the June 2000 fire around HAMMER resulted in small unburned sage 'islands' that contain the only remaining sagebrush (Appendix B). It is recommended that areas disturbed by construction of the EVOC facilities be revegetated using species native to the Hanford Site per the mitigation action plan in Appendix C.

5.1.9 Consumption or Commitment of Nonrenewable Resources

Consumption of nonrenewable resources (e.g., steel, concrete, grout, etc.) would occur for each of the planned sites. None of the materials to be used are in short supply. The amount of consumption would be minimal.

5.1.10 Effects on Federal or State Listed, Proposed or Candidate Threatened or Endangered Species

The Hanford Biological Review (Appendix B) states “Burrowing owls are classified as a federal species of concern, a Washington State “candidate” species, a WDFW priority species, and a Hanford Site Biological Resources Management Plan (BRMaP) level III resource. The burrowing owl is a species experiencing recent regional decline and all BRMaP level III resources require mitigation”. To mitigate the potential impacts on the burrowing owl as located on the EVOC, the entrance, parking lot, and two pads were moved south to avoid impacting the nest site.

This Hanford Biological Review (Appendix B) also states “Horned larks, loggerhead shrikes, and western meadowlarks are migratory birds protected under the Migratory Bird Treaty Act (16 USC, Chapter 7, §703), which states it is unlawful to “take” or “attempt to take” any nest or eggs from a migratory bird”. Loggerhead shrikes are also classified as a Washington State "candidate" species. It is advised that if work has not been completed by April 15, 2003, bird avoidance measures be in place to reduce the likelihood of an 'unlawful take' as much as reasonably as possible. As practicable, construction activities would be suspended until the end of nesting season.

5.1.11 Effects on Cultural Resources

The Hanford Cultural Resources Review (Appendix A) was conducted. The review concluded: "There is a finding of no effect to historic properties and no further actions are required". It was further recommended that intermittent monitoring occur by an archaeologist to ensure that potential historic properties are not impacted by project activities. A response from the State Historical Preservation Officer confirmed this conclusion (Appendix A). No adverse impacts under the *National Historic Preservation Act of 1966* are expected.

5.1.12 Effects on any Floodplain or Wetland

The construction would not occur in a 100- or 500-year floodplain nor within any area designated as a wetland.

5.1.13 Effects on any Wild and Scenic River, State or Federal Wildlife Refuge, or Specially Designated Area

The proposed action is outside any Wild and Scenic River corridor, state or federal wildlife refuge, or specially-designated area.

5.1.14 Reasonably Foreseeable Accidents Considered and the Effects

The reasonably foreseeable accidents during construction would be typical construction accidents. Nonradiological risks to personnel from occupational illness or injury are based on statistics for DOE and DOE contractor experience (DOE 2000). The lost workday rate is 63 per 200,000 hours of construction work. The fatality rate is close to zero per 200,000 hours of work. About 2 lost workdays and no fatalities would be expected during the construction phases. All construction personnel for DOE projects would follow approved DOE safety procedures for construction activities. All construction personnel for NUTS would follow Occupational Safety and Health Administration (OSHA) 1910.267

standards. Typical construction hazards would exist; however, the risk of severe accidents would be small.

5.2 OPERATION PHASE AND POST-OPERATION IMPACTS

Impacts from operational activities are described in the following sections.

5.2.1 Soil or Subsurface Disturbance

There would be no soil or subsurface disturbances anticipated during operation of EVOC, NUTS, or CTF, except for the earth moving training area within NUTS. The earth moving area would be continually used. All operations of the proposed action would occur in previously disturbed areas.

5.2.2 Liquid Discharges to the Groundwater or Surface Waters

It is not expected that any liquid discharges would be made to the groundwater or surface waters from operation of EVOC, NUTS, or CTF.

5.2.3 Gaseous, Particulate, or Thermal Discharges to the Air

Small quantities of gaseous, particulate, or thermal discharges from such activities as the motor vehicles on the EVOC course or vehicles/machines involved in activities at NUTS would be generated during routine operations of the proposed action. Small quantities of emissions could occur at the CTF from the simulants as various types of mixing equipment are tested. Small amounts of emissions would occur from vehicles arriving and leaving EVOC, NUTS, and CTF.

The CTF has a design life of 30 years (RPP-5566). It is expected that the design life of NUTS and EVOC also would be approximately 30 years. Eventual decommissioning and dismantlement of EVOC, NUTS, and CTF would comply with applicable regulations and procedures in effect at that time. The impacts of the operations and post-operations of the proposed action are considered to be relatively minor. No substantial increases in the overall emissions are envisioned from the proposed action and no changes to the PSD Permit are expected.

5.2.4 Radionuclide Releases or Direct Radiation Exposure

There would be no radionuclide releases or direct radiation exposure expected from the operation or post-operations of the proposed action.

5.2.5 Nonhazardous Solid Waste Generated

Emergency Vehicle Operations Course

It is expected that only small amounts of nonhazardous solid waste would be generated during the operational phase of the EVOC. Once the sites are decommissioned and dismantled, typical demolition waste might be expected, and no further waste generation would occur. The demolition waste generated

would be disposed into existing landfills. The addition of demolition waste into the existing landfills would be small compared to the expected overall capacity of the landfills. All nonhazardous waste would be disposed of in accordance with applicable requirements.

National Utility Training Services Site

It is expected that only small amounts of nonhazardous solid waste would be generated during the operational phase of NUTS. Once the sites are decommissioned and dismantled, typical demolition waste is expected, and no further waste generation would occur. The demolition waste generated might be disposed into existing landfills. The addition of demolition waste into the existing landfills would be small compared to the expected overall capacity of the landfills. All nonhazardous waste would be disposed of in accordance with applicable requirements.

Cold Test Facility

The CTF would be using nonhazardous and nonradiological simulants and would be capable of accepting, staging, and directing up to 600,000 gallons (2,271,000 liters) of simulants for the testing of tank equipment and training of personnel. Simulants are types of materials that would mimic certain characteristics of the waste contained in the SSTs or DSTs and would be nondangerous and nonradioactive. The CTF would be capable of segregated storage, separate from the CTF tank, of the different types of waste simulants used in the CTF. When a simulant is no longer needed, the simulant would be disposed of in accordance with all applicable regulations and procedures. Typical simulant composition is as follows (RPP-5566).

Simulant	Composition
Insoluble waste with large heavy particles	Silica sand: Median particle size = 275 μm± 20 μm Density = 3 g/mL
Insoluble, high shear strength waste	Kaolin or bentonite clay
Soluble salt	Sodium bicarbonate or sodium nitrate
Concentrated supernatant	Supernatant consisting of sodium nitrate dissolved in water

5.2.6 Hazardous or Dangerous Waste Generated

Small amounts of potential hazardous waste (e.g., waste oil and/or cleaning agents) expected to be generated during operation of the EVOC, NUTS or CTF would be managed and disposed in accordance with applicable federal and state regulations. No hazardous or dangerous waste is expected to be generated during post-operation. Waste generation resulting from the proposed action is expected to be minimal compared to annual waste generation on the Hanford Site.

5.2.7 Disturbance to Previously Undeveloped Areas

There would be no disturbance to previously undeveloped areas during operation and post-operation.

5.2.8 Consumption or Commitment of Nonrenewable Resources

Consumption of nonrenewable resources (e.g., petroleum products, diesel fuel, etc.) would occur during operation and post-operation. The amount of consumption is expected to be small.

5.2.9 Effects on Cultural Resources

There would be no effect on cultural resources during operation and post-operation of the proposed actions.

5.2.10 Effects on Federal or State Listed, Proposed, or Candidate Threatened or Endangered Species

Effects on federal or state listed, proposed, or candidate threatened or endangered species during operation and post-operation are expected to be minimal.

5.2.11 Effects on any Floodplain or Wetland

The proposed actions are outside any floodplains and wetlands.

5.2.12 Effects on any Wild and Scenic River, State or Federal Wildlife Refuge, or Specially Designated Area.

The proposed actions are outside any Wild and Scenic River corridor, state or federal wildlife refuge, or specially designated area.

5.2.13 Reasonable Foreseeable Accidents Considered and the Effects

Emergency Vehicle Operations Course

A reasonably foreseeable accident during operation would be the collision of vehicles or a single vehicle accident that would occur while training on the course. A similar facility located in Shelton, Washington has had a few minor/minimal accidents and no major vehicle accidents or personnel injuries have occurred during the operation of the course. Key in operating a safe EVOC is good instruction and knowing the abilities of each student training on the course.

Potential vehicle accidents are remote since there would be individual runs of vehicles. Possible fires from catalytic converters might occur. In either case, a local fire or police agency would be notified. The soft sand surrounding the EVOC would prevent errant vehicles from the course from entering Horn Rapids Road to the south or Ila Lane to the east of the EVOC. Physical barriers would be added as necessary. Spills that could occur from accidents would be handled and disposed of in accordance with applicable federal and state regulations.

Hazards common to demolition projects would exist in the post-operation phase of the proposed project. Post-operation would be conducted in conformance with recognized safety codes and regulations to

ensure a safe working environment. Public health and safety would not be affected because the area would be closed to the general public.

National Utility Training Services Site

The Northwest Line Joint Apprentice Training Committee operates a training school on the Oregon coast that consists of steel towers, wood towers with transmission lines, a pole yard, and an indoor pole yard for 'hot sticking' (the use of fiberglass poles with steel attachments for handling of electrically charged lines). This school has been in operation for 40 years with approximately 250 students per year attending. Approximately 3 to 4 minor accidents occur each year. These accidents are classified as non-time loss accidents. In 40 years, only one major accident occurred when a student fell from a pole. It is expected that NUTS would experience a similar minimal accident rate.

Hazards common to demolition projects would exist in the post-operation phase of the proposed project. The post-operation would be conducted in conformance with recognized safety codes and regulations to ensure a safe working environment. Public health and safety would not be affected because the area is closed to the general public.

Cold Test Facility

A reasonably foreseeable accident during testing operations would be falls from scaffolding, hazards commonly associated with the installation of equipment such as electrical hazards, hazards from lifting, or the use of power tools. Accidents occurring from these types of activities are minimal (DOE 2000). Impacts from natural hazards such as floods, tornadoes, earthquakes, or fire will have minimal impact on the CTF (Huckfeldt 2002).

The CTF has minimal reasonable foreseeable accidents because CTF is a nonhazardous, nonradioactive facility. Hazards common to demolition projects would exist in the post-operation phase of the proposed project. The post-operation would be conducted in conformance with recognized safety codes and regulations to ensure a safe working environment. Public health and safety would not be affected because the area would be closed to the general public.

5.3 SOCIOECONOMIC IMPACTS

In a community of over 140,000 persons (PNNL-6415) with a workforce in excess of 8,000 persons on the Hanford Site, the socioeconomic impacts of this proposed action would be expected to be small. Less than two dozen people are expected to be added employment due to the proposed action. There would be no discernible impact to employment levels within Benton and Franklin Counties.

5.3.1 Emergency Vehicle Operations Course

EVOC would bring in emergency service personnel from out of the area and have an expected small impact on the local economy.

5.3.2 National Utility Training Services Site

The direct revenue for the local economy is estimated at over $1 million based on $100 per person per day for lodging, meals, and miscellaneous spending. NWPPA estimated 9,000 overnight stays would be required by outside students to receive the proposed training. This number, multiplied by $100/day, calculates to a conservative estimate of $900,000 for the first full year of operation.

5.3.3 Cold Test Facility

CTF would be training personnel from the local area, although it is anticipated that vendors staying in the local area would generate a minor amount of revenue while their equipment is being tested at the CTF. This contribution to the local economy would be minimal and have little impact.

5.4 ENVIRONMENTAL JUSTICE IMPACTS

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations", requires that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or socioeconomic effects of their programs and activities on minority and low-income populations. Minority populations and low-income populations are present near the Hanford Site (PNNL-6415). The analysis of the potential impacts of the proposed action indicates that there would be minimal impacts to both the offsite population and potential workforce. Therefore, it is not expected that there would be any disproportionately high and adverse impacts to any minority or low-income portion of the community.

5.5 CUMULATIVE IMPACTS

In analyzing the cumulative impacts of the 210 acres (85 hectares) for the projects, approximately half would be disturbed. The CTF and the HAMMER expansion area are located on land that mostly burned during the 24 Command Fire of 2000. The mitigation action plan (Appendix C) requires the reseeding of disturbed areas with native Hanford Site species.

Mitigation of the burrowing owl nesting site would occur by moving the parking lot and entrance to the EVOC from the original site location. Mitigation of the horned larks, loggerhead shrikes, and western meadowlarks nesting sites would occur by not working on the EVOC site during the nesting season.

Waste generation resulting from the proposed action is not expected to be substantial compared to annual waste generation on the Hanford Site. These materials would be managed and recycled or disposed of in accordance with applicable federal and state regulations. Disposal of waste as a result of the proposed action would not substantially affect any associated disposal sites.

The EVOC and NUTS would have an impact on the economy by bringing in students from outlying areas that would be lodged overnight. However, expansion of local lodgings would not be necessary as adequate space is available for most of the year. The CTF would have minimal impact on the economy because training would be for personnel from the local area. The overall economic impact of the proposed actions are estimated to be low.

Based on the analysis from previous sections in this EA, as well as the mitigation measures considered, no substantial cumulative impacts are expected.

5.6 IMPACTS FROM ALTERNATIVES

Alternatives and the no action alternative are discussed in the following sections. Cumulative impacts for the alternatives were not fully analyzed because impacts technically were not viable options and/or data were not developed sufficiently.

5.6.1 Impacts of the No Action Alternative

Emergency Vehicle Operations Course

The no action alternative for EVOC would be not to build the EVOC at HAMMER, which would mean emergency service personnel would not receive local training in emergency response driving. This land to the west of the existing HAMMER would not be disturbed.

National Utility Training Services Site

The no action alternative would be not to fully develop the NUTS and would limit the utility training options to what exists on the original 40 acres (16.2 hectares). This includes trenching areas, wood pole transmission structures, generation facilities, wood pole climbing yard, but would exclude the substation, lattice towers training areas, and at the helipad and the excavation training area would not expand. This would result in inadequate training of utility personnel in these areas, although there would be less direct environmental impact to the immediate area.

5.6.2 Impacts of Alternatives

Emergency Vehicle Operations Course

Relocation of EVOC to another location would involve the additional cost of leasing/purchasing space, in addition to creating safety hazards because of public access. If this were to occur elsewhere, no Hanford Site habitat would be disturbed.

National Utility Training Services Site

The alternative of locating the NUTS Facility at Camp Rilea was eliminated due to the limited amount of land available for locating the planned training structures and that the current training facility is a secondary use of Camp Rilea. The available land near the I-5 corridor was also not feasible due to height restrictions along this corridor that would eliminate some of the necessary training structures. Also, rainy weather in either of these locations would greatly restrict the number of outdoor training days.

Land that was close to the Hammer Facility was also considered. Zoning for this area is for an industrial park, which is unfeasible for a utility training facility.

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6.0 PERMITS AND REGULATORY REQUIREMENTS

It is the policy of the DOE to carry out its operations in compliance with all federal, state, and local laws and regulations; Presidential Executive Orders; DOE Orders; and DOE-RL Directives. The proposed action would follow pollution prevention requirements under *Executive Order 12856: Federal Compliance with Right-To-Know Laws and Pollution Prevention Requirements*. Environmental regulatory authority over the Hanford Site is vested in federal and state agencies.

The Hanford Site is subject to the emission limits of Washington Administrative Code (WAC) 173-400-040, "General Standards for Maximum Emissions", which are designed to protect existing air quality. No state permits would be required.

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7.0 TRIBAL GOVERNMENTS, AGENCIES AND OTHERS CONSULTED

Before approval of this EA, it was sent in draft for a 30-day review to the following:

- Nez Perce Tribe
- Confederated Tribes of the Umatilla Indian Reservation
- Yakama Nation
- Confederated Tribes of the Colville Reservation
- Wanapum
- Bonneville Power Administration
- General Services Administration
- U.S. Department of Education
- U.S. Fish and Wildlife Service
- Washington State Departments of Ecology, Fish & Wildlife, and Health
- Washington State Historic Preservation Officer
- Oregon Office of Energy
- Benton County
- Franklin County
- City of Pasco
- City of Richland
- City of West Richland
- Hanford Advisory Board
- Heart of America
- Northwest Public Power Association
- Physicians for Social Responsibility.

A draft EA was also made available in the DOE Reading Room (Consolidated Information Center at Washington State University Tri-Cities) and at the Richland Public Library, and on the Hanford webpage during the comment period.

Comments were received from the Nez Perce tribe, Yakama Nation, the Oregon State Department of Energy, and the Washington State Department of Fish and Wildlife. Comments and responses are included as Appendix D.

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8.0 REFERENCES

65 FR 37253, June 9, 2000, *Proclamation 7319 of June 9, 2000, Establishment of the Hanford Reach National Monument,* Presidential Documents, June 13, 2000.

DOE/RL-96-32, *Hanford Site Biological Resources Management Plan,* August 2001, U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE, 2000, *DOE Computerized Accident/Incident Reporting System (CAIRS), including Occupational Injury and Property Damage Summary,* January-March 2000, U.S. Department of Energy, Washington, D.C.

DOE/EIS-0222-F, *Final Comprehensive Land-Use Plan Environmental Impact Statement, Richland, Washington,* September 1999, U.S. Department of Energy, Richland, Washington

DOI, 2000, *24 Command Fire, Burned Area Emergency Rehabilitation(BAER) Plan,* July 7, 2000, U.S. Department of Interior, Northern States Burned Area Emergency Rehabilitation Team, Hanford, Washington.

Executive Order 12856, "Federal Compliance with Right-To-Know Laws and Pollution Prevention Requirements".

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*.

Huckfeldt, R. A., 2002, *Preliminary Fire Hazards Analysis for the Cold Test, Training, and Mockup Facility,* CH2M HILL Hanford Group, Inc., Richland, Washington.

Migratory Bird Treaty Act, 16 U.S.C. 1431 - 1543, et seq.

PNNL-6415, *Hanford Site National Environmental Policy Act (NEPA) Characterization*, Rev. 14, September 2001, Pacific Northwest National Laboratory, Richland, Washington.

PNNL-13487, *Hanford Site Environmental Report for Calendar Year 2000*, September 2001, Pacific Northwest National Laboratory, Richland, Washington.

RPP-5566, Rev. 1, *Cold Test, Training, and Mockup Facility Functions and Requirements*, March 2001, CH2M Hill Hanford Group, Inc., Richland, Washington.

RPP-7502, Rev. 0, *Acquisition Strategy for Cold Test, Training, and Mock-up Facilities,* December 2000, CH2M Hill Hanford Group, Inc., Richland, Washington.

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APPENDIX A

CULTURAL RESOURCES REVIEW

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Pacific Northwest National Laboratory

Operated by Battelle for the
U.S. Department of Energy

July 19, 2001

Historic Properties Identified
No Historic Properties Adversely Affected with stipulations
SHPO Concurrence Required

Mr. Bret Akers
Fluor Hanford/HAMMER
P.O. Box 1000- MS G5-54
Richland, WA 99352

Mr. Greg McLellan
CHG/MS S7-90

CULTURAL RESOURCES REVIEW OF HAMMER 190 ACRE EXPANSION (HCRC# 2001-600-030)

Dear Mr. Akers and Mr. McLellan,

Project Description
In response to your request received on July 3, 2001, staff of the Hanford Cultural Resources Laboratory (HCRL) conducted a cultural resources review of the subject project located east, west and north of the existing HAMMER facility, on the Hanford Site, Richland, Washington. (See attached map). The HAMMER Training Center has been granted additional acreage for expansion. The expansion includes approximately 190 acres immediately to the east, west, and north of the existing 120 acre HAMMER Site. Several construction activities are being proposed for the new expansion area including an Emergency Vehicle Operations Course (EVOC), expansion of the National Utility Training Site (NUTS), the Cold Test Mock-up Facility (CTTMF) and a railway-training center. The Cultural Resource Review Request for the CTTMF was initially being reviewed under separate cover HCRC# 2001-600-028. To avoid duplication, the CTTMF review is being addressed within this HAMMER 190 Acre Expansion Cultural Resources Review.

Notifications and Public Involvement
On July 5, 2001:

- Per 36 CFR 800, the State Historic Preservation Officer (SHPO) and Tribes were notified of this cultural resources review request and the Area of Project Effect (APE). The APE is defined as the project location boundaries that are delineated by the shaded area in the attached map.
- Per 34 Stat. 225, 16 U.S.C. 431, the United States Fish and Wildlife Service (USFWS) were notified of this request for cultural resource review.

902 Battelle Boulevard • P.O. Box 999 • Richland, WA 99352

Results of the Identification of Historic Properties Survey (Literature and Records Review)

A records and literature search conducted by staff at HCRL revealed that the project expansion area is located in undisturbed ground. All of the project area east of Ila Lane, which runs north, south just west of the existing HAMMER facility, has been previously surveyed for cultural resources in 1992-1993 for the initial HAMMER facility proposal (HCRC # 93-600-040). On July 19, 2001, HCRL staff conducted a pedestrian archaeological survey of the unsurveyed portions located west of Ila Lane. No cultural resources were observed. The HCRC # 93-600-040 survey located four sites, three of which are located within the project boundaries. HT-93-086 (a late 1950s-1960s historic dump) and HT-92-008 (an historic trash scatter) were determined to be insignificant and not eligible to the National Register of Historic Place. H3-21 the Yakima Irrigation Ditch that runs north/south along side the eastern boundary of the project was considered to be eligible to the National Register of Historic Places. Although a Determination of Eligibility has not been completed, the SHPO recommended that a 100-meter buffer zone be designated along side the irrigation ditch and concurred with the findings of insignificance for HT-93-086 and HT-92-008. Although most of the Yakima Irrigation ditch lies approximately 100-200 meters east of the eastern most project boundary, portions of the Northeast boundary intersect the Yakima Irrigation Ditch. (See attached map).

Findings and Actions Required

It is the finding of HCRL that no historic properties will be adversely affected by this undertaking, provided the project maintain a 100 meter buffer between project ground disturbing activities and the Yakima Irrigation ditch. Since the project area is located in undisturbed ground, a slight potential exists for historic properties to be located below ground in the vicinity of the Yakima Irrigation Ditch. For these reasons it is further recommended that intermittent monitoring occur by an archaeologist to ensure that potential historic properties are not impacted by project activities. The Site Preservation Officer (SPO), Dee Lloyd, will submit official documentation to the SHPO of our findings. The SHPO will respond within 30 days of receipt of this letter. **No project activities can begin until the consultation with the SHPO has been completed.**

The workers must be directed to watch for cultural materials (e.g., bones, artifacts) during all work activities. If any are encountered, work in the vicinity of the discovery must stop until an HCRL archaeologist has been notified to assess the significance of the find, and, if necessary, arrange for mitigation of the impacts to the find. The HCRL must be notified if any changes to project location or scope are anticipated. This is a Class IV Case, Involving Undisturbed Ground.

If you have any questions, please call me at 376-4626. Please use the HCRC# above for any future correspondence concerning this project.

Very truly yours,

Ellen Prendergast
Scientist
Cultural Resources Project

Concurrence: _____
D. C. Stapp, Project Manager
Cultural Resources Project

Review and Concurrence: _____
D. W. Lloyd, Site Preservation Officer
DOE, Richland Operations Office

cc: R W. Small, K8-50
E. J. Cruz, H6-60
D. W. Lloyd, (via Cheryl Runyon) A5-58 (2)
G. D. Cummins, A1-14
Environmental Portal, A3-01
Kim M. Welsch G1-30
File/LB

RL-665 (10/00)

REQUEST FOR CULTURAL AND/OR ECOLOGICAL RESOURCES REVIEW FOR THE HANFORD SITE

Review Tracking Number: 2001-600-030

ERC Projects (BHI, CH2M Hill)

Direct Form and Cultural Resource Questions To:
Tom Marceau
Phone **372-9289** Fax **372-9654** MSIN **H0-23**

Direct Form and Ecological Resource Questions To:
Ken Gano
Phone **372-9316** Fax **372-9654** MSIN **H0-23**

All Other Hanford Projects (PHMC, PNNL, Other)

Direct All Forms and Cultural Resource Questions To:
Ellen Prendergast
Phone **376-4626** Fax **373-2958** MSIN **K6-75**

Direct Ecological Resource Questions To:
Mike Sackschewsky
Phone **376-2554** Fax **372-3515** MSIN **K6-85**

Date Sent: 06/27/2001 **Date Findings Requested By:** 07/31/2001

Primary Contact: Bret Akers Company/Organization: FH/HAMMER
E-mail: bret_m_akers@rl.gov
Telephone: 376-3712 Fax: 373-9354 MSIN: G5-54

Secondary Contact: Kim Knight Company/Organization: FH/HAMMER
Telephone: 373-6792 Fax: 373-9354 MSIN: G5-54

Project Name: HAMMER Training Center Expansion
Project Number/COA: 106364/CA40
RL Project Manager: R. W. Small

REQUESTOR SHOULD SUBMIT A COPY OF THIS REQUEST TO THE RL PROJECT MANAGER UNDER WHOM THEIR PROJECT FALLS WITHIN 5 DAYS.

Project Description, including Time Period over which proposed action will occur:

The HAMMER Training Center has been granted additional acreage for expansion. The expansion includes approximately 190 acres immediately to the east, west, and north of the existing 120 acre HAMMER Site. Several construction activities are being proposed for the new expansion area including and Emergency Vehicle Operations Course (EVOC), expansion of the National Utility Training Site (NUTS), the Cold Test Tank Mock-up Facility (CTTMF), and a railway training area. An Environmental Assessment has been initiated for the entire 190 acre expansion area.

Project Dimensions:

See attached map. The area has been flagged on the ground.

Depth of Excavation(s): approximately ten feet

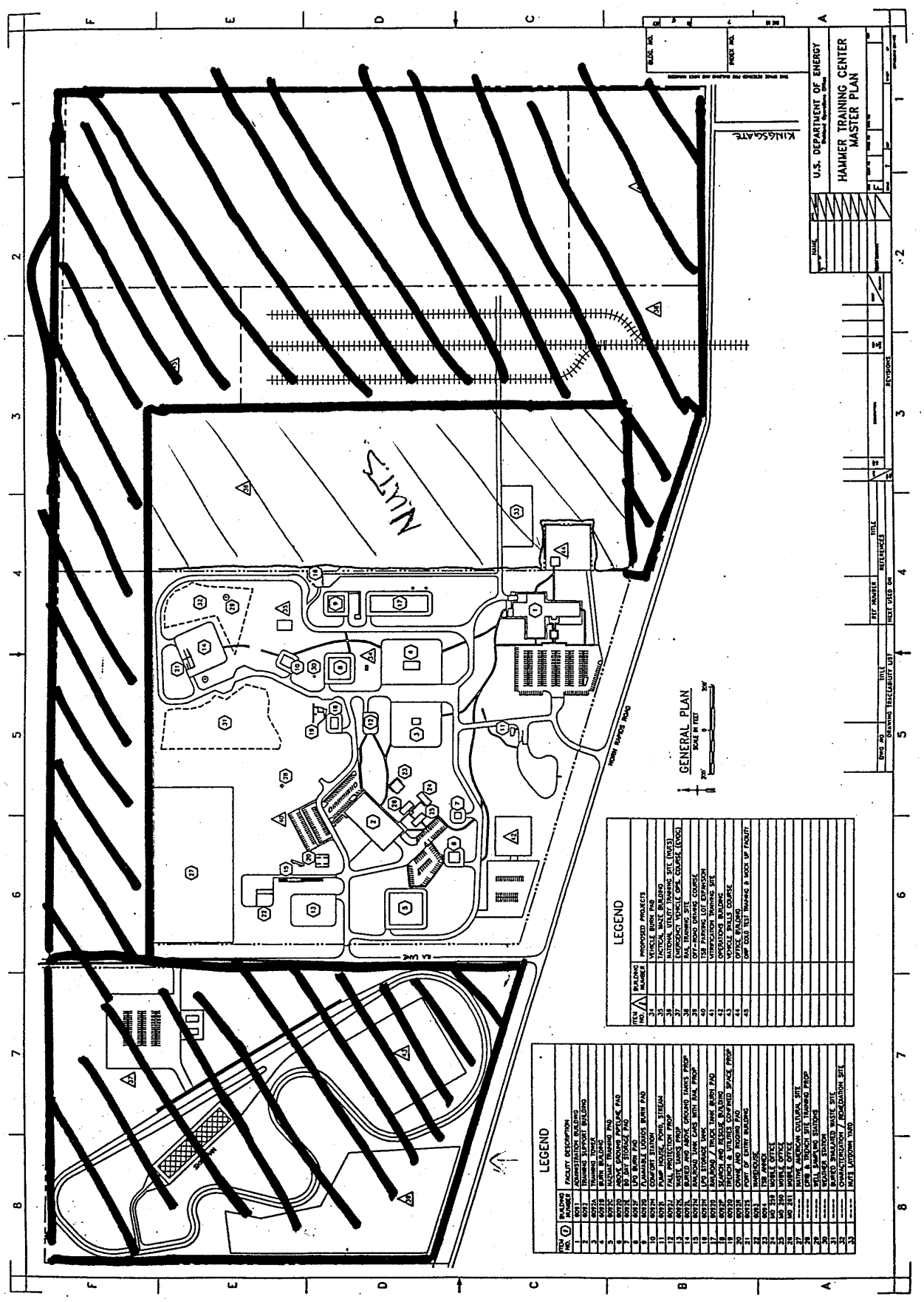
Project Location:

☐ 100 Area ☐ 200 East Area ☐ 200 West Area ☐ 300 Area ☐ 400 Area
☒ 600 Area ☐ 700 Area ☐ Other:

Township 10 N, Range 28 E UTM: Easting: _____ Northing: _____

Please also provide the following:
1. Overview map showing project location (or other suitable map to assist in finding the project site)
2. Map or scale drawing showing all excavation areas (including water, sewer, and power lines, etc.), parking, topsoil storage areas, equipment staging areas, access roads, and utility corridors.

Submitted By: Bret Akers Telephone: 376-3712


U.S. DEPARTMENT OF ENERGY
HAMMER TRAINING CENTER
MASTER PLAN
GENERAL PLAN
SCALE IN FEET
LEGEND
PROPOSED PROJECTS
LEGEND
FACILITY DESCRIPTION
ADMINISTRATION BUILDING
TRAINING SUPPORT BUILDING
TRAINING TOWER
MOUT TRAINING PAD
MOUT TRAINING PAD
MOVE GROUND PIPELINE PAD
LPG STORAGE PAD
LPG BURN PAD
CONFINED SPACE PROP
PUMP HOUSE, POND, STREAM
FALL PROTECTION PROP
WASTE TANKS PROP
BURIED AND ABOVE GROUND TANKS PROP
LPG STORAGE TANK
MAZE / TRUCK TANK BURN PAD
SEARCH AND RESCUE BUILDING
TRENCH & VEHICLE CONFINED SPACE PROP
OFFICE AND PROPANE PAD
OFFICE BUILDING
WAREHOUSE
TSR ANNEX
MOBILE OFFICE
MOBILE OFFICE
MOBILE OFFICE
WELL SAMPLING STATIONS
WELL & TRENCH SITE TRAINING PROP
WELL MANITORING STATIONS
BURIED SIMULATED WASTE SITE
CHARACTERIZATION / REMEDIATION SITE
HOT LAUNDRY TANK
VEHICLE BURN PAD
TACTICAL MAZE BUILDING
NATIONAL UTILITY TRAINING SITE (NUTS)
EMERGENCY VEHICLE OPS. COURSE (EVOC)
RAIL TRAINING SITE
OFF ROAD VEHICLE COURSE
138 PARKING LOT EXPANSION
VERIFICATION TRAINING SITE
OPERATIONS BUILDING
VEHICLE SKILLS COURSE
OFFICE BUILDING
SAF LOAD TEST TRAINING & HOOK UP FACILITY
KINGSGATE
NUTS
HORN RAPIDS ROAD
EX LINE

STATE OF WASHINGTON
OFFICE OF COMMUNITY DEVELOPMENT
Office of Archaeology and Historic Preservation
1063 S. Capitol Way, Suite 106 • PO Box 48343 • Olympia, Washington 98504-8343 • (360) 586-3065 Fax Number (360) 586-3067 • http://www.oahp.wa.gov

April 12, 2001

Mr. Joel Hebdon
Regulatory Compliance & Analysis Division
Richland Operations Office
Department of Energy
PO Box 550
Richland, WA 99352

Re: HAMMER 190 Acre Expansion
Log No.: 081401-10-DOE
Code: HCRC # 2001-600-030

Dear Mr. Hebdon;

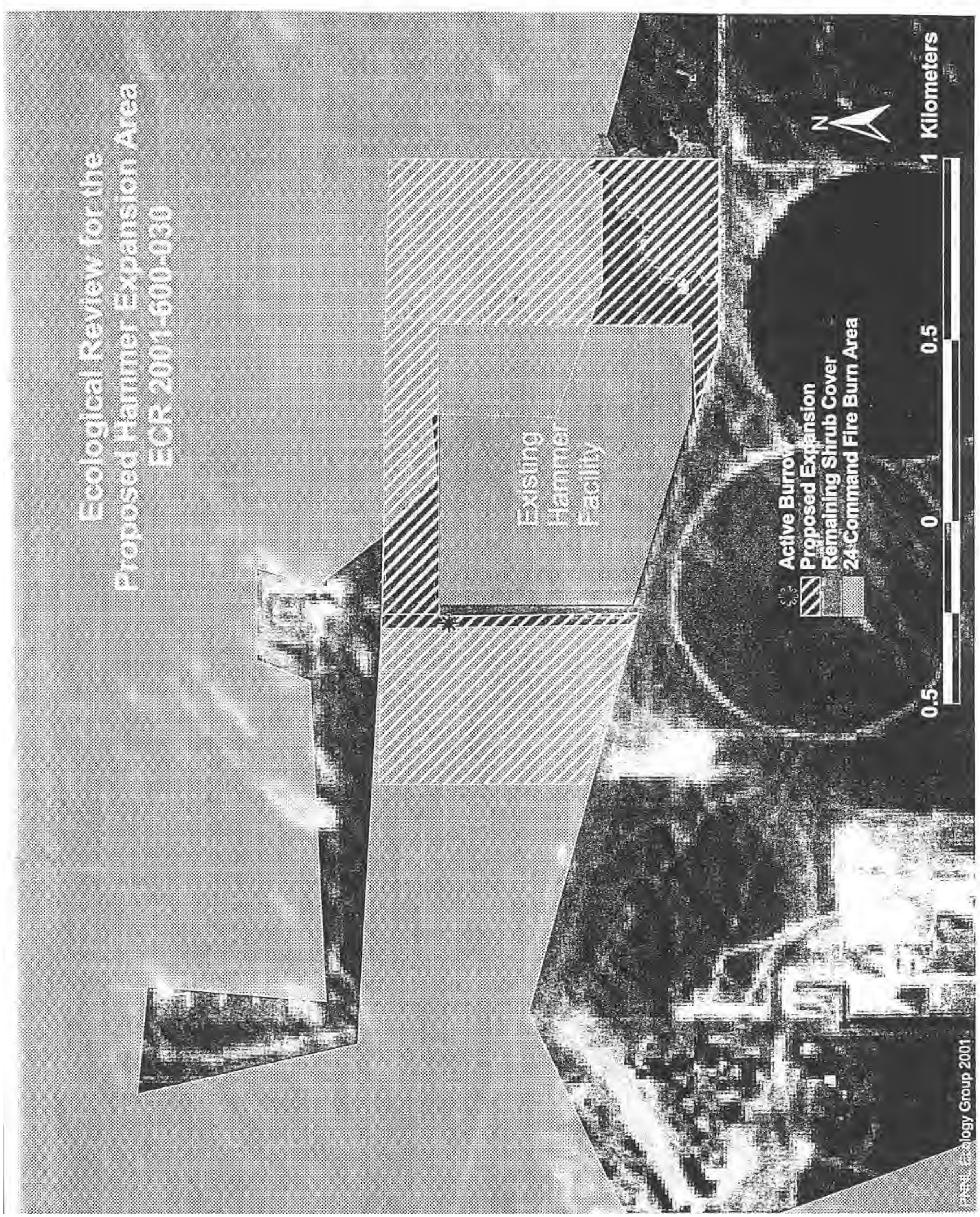
Thank you for providing a copy of the cultural resources survey assessment by the Pacific Northwest National Laboratory HCRL for the proposed 190 expansion at HAMMER. We concur with their professional recommendations and your finding that no cultural resources are in the identified impact area. We concur with your requirement that monitoring be required and we look forward to receiving that report.

These comments are based on the information available at the time of this review and on the behalf of the State Historic Preservation Officer. Should additional information become available, our assessment may be revised. In the event that archaeological or historic materials are discovered during project activities, work in the immediate vicinity should be discontinued, the area secured, and this office notified.

Thank you for the opportunity to comment and a copy of these comments should be included in subsequent environmental documents.

Sincerely,

Robert G. Whitlam, Ph.D.
State Archaeologist
(360) 586-3080
email: robw@cted.wa.gov


Ecological Review for the
Proposed Hammer Expansion Area
ECR 2001-600-030
Existing
Hammer
Facility
Active Burrow
Proposed Expansion
Remaining Shrub Cover
24 Command Fire Burn Area
0.5
0
0.5
1 Kilometers
N
PNNL Ecology Group 2001

APPENDIX C

MITIGATION ACTION PLAN

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DRAFT 9/16/02

MITIGATION ACTION PLAN

FOR
EXPANSION OF THE
VOLPENTEST HAZARDOUS MATERIALS MANAGEMENT AND
EMERGENCY RESPONSE
TRAINING AND EDUCATION CENTER
HANFORD SITE, RICHLAND, WASHINGTON

Supplement to DOE/EA 1412

U.S. DEPARTMENT OF ENERGY
RICHLAND, WASHINGTON

September 2002

DRAFT 9/16/02

CONTENTS

DRAFT 9/16/02

LIST OF TERMS

BPA	Bonneville Power Administration
CTF	Cold Test Facility
DOE	Department of Energy
DOE/RL	Department of Energy – Richland Operations
EVOC	Emergency Vehicle Operations Course
HAMMER	Volpentest Hazardous Materials Management and Emergency Response Training and Education Center
HCP-EIS	Hanford Comprehensive Land Use Plan Environmental Impact Statement
MBTA	Migratory Bird Treaty Act
NUTS	National Utility Training Services
NWPPA	Northwest Public Power Association

DRAFT 9/16/02

1. SUMMARY OF PROJECT

The proposed project is to expand the current Hazardous Materials Management and Emergency Response Training and Education Center (HAMMER) facilities, located on the southern boundary of the U.S. DOE Hanford Site, Richland, WA. (Figure 1). The proposed action includes constructing and operating the Emergency Vehicle Operations Course (EVOC), which would be located on approximately 60 acres (24.2 hectares); expanding, operating, and transferring ownership of National Utility Training Services (NUTS) site, which is located on approximately 80 acres (32.3 hectares) [40 acres (16.2 hectares) from the original HAMMER footprint and 40 additional acres (16.2 hectares) from the expansion]; and reserving the remaining space [approximately 92 acres (37.2 hectares)] north of the original HAMMER, NUTS, and the Cold Test Facility (CTF) and south of the Bonneville Power Administration (BPA) power lines for future development (Figure 2). EVOC would provide training to emergency service personnel when driving in emergency response situations. NUTS would provide training for utility personnel.

1.1 Emergency Vehicle Operations Course

EVOC would be located on the approximate 60-acre (24.2-hectare) section to the west of Ila Lane and north of Horn Rapids Road (Figure 2). EVOC would consist of an asphalt course approximately 36 feet (11 meters) wide and 1 mile (1.6 kilometer) long. The course would include a quarter mile (0.4 kilometer) straightaway, a 180-degree corner, and a serpentine of several more turns of varying degrees and radii. The straightaway would be level while the rest of the course would follow approximately the natural elevations of the land. In addition to the asphalt course, a 160,000 square foot (14,864 square meter) asphalt pad would be constructed as a skills course for low speed vehicle maneuvers. A parking area, connex box pad, and shelter area pad also would be constructed at the entrance to the course. The parking area would be approximately 12,500 square feet (1,161 square meter), and the connex box and shelter area pads would be approximately 1,500 square feet (139 square meters) and 600 square feet (55.7 square meters) respectively.

1.2 National Utility Training Services Site

Title to the 80 acres (32.3 hectares) NUTS site, located on the eastern side of the existing HAMMER site (Figure 2), would be transferred to the Northwest Public Power Association (NWPPA). The NUTS site would have properly positioned spans of both wooden and steel transmission lines with room for erecting and dismantling. An area would be used for a helipad, a parking garage for equipment, and an expanded area for earthmoving training.

1.3 Areas Reserved for Future Development.

Approximately 92 acres (37.2 hectares) are reserved for future development and would be addressed under a future NEPA review once plans have been developed. These areas are located to the north of the original HAMMER and to the north of the CTF and south of the BPA power lines (Figure 2).

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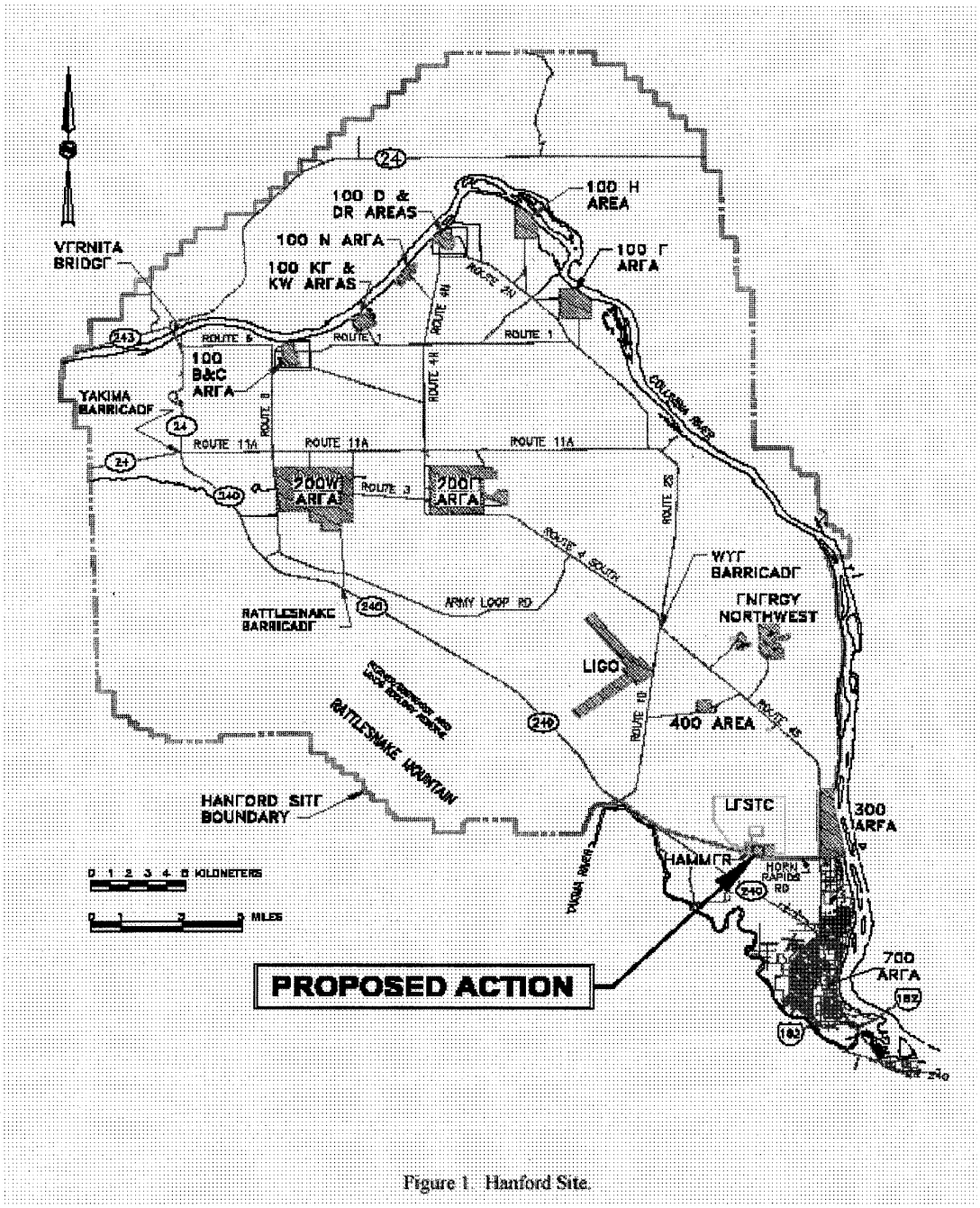

Figure 1. Hanford Site.

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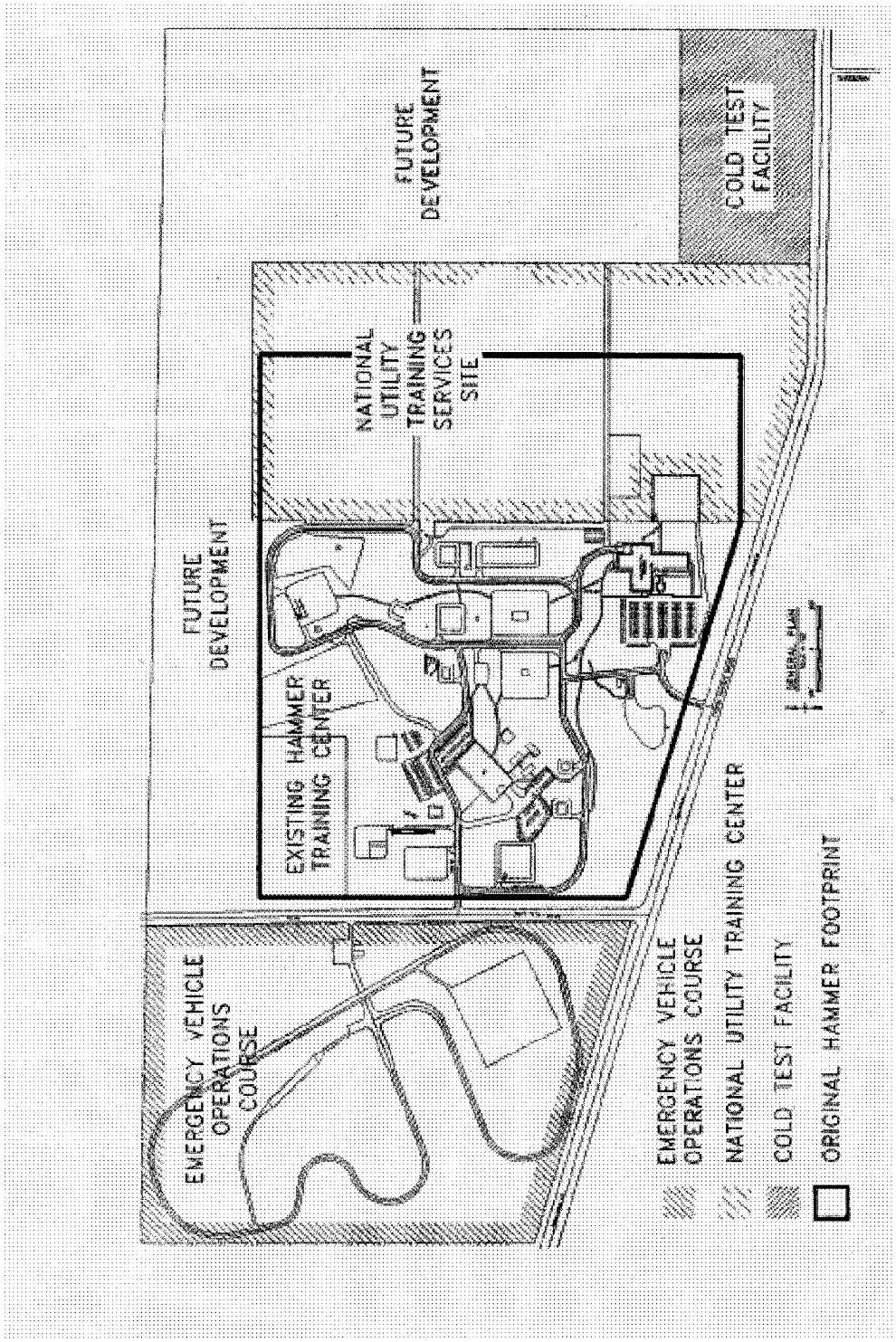

Figure 2. HAMMER Facilities

DRAFT 9/16/02

2. SUMMARY OF IMPACTS TO BE MITIGATED

Much of the proposed expansion area was burned during the 24 Command Fire in June, 2000. This resulted in a significant reduction in the proportion of shrub cover present. The burned area is now dominated by cheatgrass (*Bromus tectorum*) and Sandberg's bluegrass (*Poa secunda*). A relatively high diversity of forbs and some sprouting bitterbrush (*Pursia tridentata*) are also present. The unburned portions of the expansion area contain many mature shrubs including big sage (*Artemisia tridentata*), bitterbrush, and snow buckwheat (*Eriogonum niveum*).

The relatively high diversity of forbs and sprouting of bitterbrush since the fire indicates the area is recovering from the fire. The nature of the firefighting activity around the HAMMER facility has resulted in small unburned sagebrush "islands" which contain the only remaining sagebrush in the general vicinity of HAMMER. Most of these islands are contained within the proposed expansion area. Although the density and aerial extent of existing sagebrush within the project area are below previously defined mitigation threshold levels (DOE-RL 2001), DOE has chosen to mitigate for the loss of these islands, if such loss occurs, because of the potential importance of these residual patches in the recovery of the native habitats in the vicinity of the HAMMER site. At present, there are no plans to disturb the remaining sagebrush islands.

There are two remaining sagebrush islands within the HAMMER expansion area. One is within the area reserved for future development north of the exiting HAMMER; this contains a sparse stand of sagebrush that covers approximately 9 acres (3.6 ha). The other remaining island covers approximately 10 ac (4 ha) surrounding the CTF.

Portions of the areas disturbed during the construction of new facilities will not be required for the operation of the facilities. The adverse impacts to such areas can therefore be rectified via revegetation with native species.

Three burrowing owls (*Athene cunicularia*) and a single active burrow were observed within the proposed EVOC site during August 2001 field surveys. The burrow collapsed prior to a resurvey of the area in August 2002. However, the area is still considered to be suitable habitat for burrowing owls. Other species protected under the Migratory Bird Treaty Act (MBTA) such as Western meadowlarks (*Sturnella neglecta*), loggerhead shrikes (*Lanius ludovicianus*), and horned larks (*Eremophila alpestris*) have been observed in the project area.

3. MITIGATION GOALS AND OBJECTIVES,

The overall goal of this mitigation plan is to compensate for the loss of burrowing owl habitat and, if necessary, to replace any sagebrush steppe habitat that may be disturbed during future HAMMER expansion activities.

The objectives of this mitigation action plan are to maintain (or preferably to increase) the population of burrowing owls in the vicinity of HAMMER via installation of artificial burrows, to maintain a no-net-loss of sagebrush habitat in the vicinity via replacement plantings, to maintain native species diversity via replanting native grasses and forbs in disturbed areas, and to minimize adverse impacts to other resources such as nesting migratory birds.

DRAFT 9/16/02

4. DESCRIPTION OF MITIGATION ACTIONS AND MITIGATION SITES

4.1 Sagebrush Habitat

HAMMER will maintain responsibility for compensatory sagebrush mitigation for the areas within the HAMMER expansion, but outside of the CTF site and the NUTS site. In the event HAMMER would need to remove sagebrush from either of the identified residual islands, then the sagebrush will be replaced at a replacement ratio of 1.5:1. The planting effort will be based on the recommended replacement units in the Hanford Site Biological Resources Mitigation Strategy (DOE/RL 1996), presently defined as 1000 tublings or bareroot/ha + structural components such as perch sites. Therefore, 1500 plants, spread out over 1.5 ha (3.7 ac) will be planted for each ha (2.5 ac) of sagebrush steppe that is disturbed.

If such mitigation is required, it will be performed at a location adjacent or near the HAMMER facility; or further from HAMMER if such a location would provide for better long term protection of the mitigation site (the area surrounding HAMMER is within a designated Industrial development zone within the HCP-EIS [DOE 1999]). The specific location will be selected based on the current development plans for the region, and in conjunction with Hanford Site biologists.

4.2 Burrowing Owls

HAMMER Operations will construct and place 20 artificial burrowing owl nests at strategic locations throughout the unused portions of the EVOC site and/or areas adjacent to the EVOC site.

4.3 Migratory Birds

To the extent possible, construction activities will be performed outside of the nesting season (assumed to be April through July). In the event that ground clearing activities must occur during the nesting season, additional surveys will be performed to identify possible nesting sites, and plans to mitigate the disturbance of identified nests will be evaluated and carried out on a case-by-case basis in cooperation with Hanford Site biologists.

4.4 Rectification / Revegetation

Areas disturbed by the construction activities will be re-vegetated using species native to the Hanford Site. All disturbed areas will be revegetated with a grass seed mix approved by Hanford Site biologists. Grass species will include Indian ricegrass (*Oryzopsis hymenoides*), big bluegrass and Sandberg's bluegrass (Varieties of *Poa secunda*), bluebunch wheatgrass (*Pseudoroegneria spicata*) and Needle-and-thread grass (*Stipa comata*). This seeding will probably occur during the fall or early winter of 2002.

DRAFT 9/16/02

Native forb species will be planted in selected portions of the site to increase the overall species diversity within the revegetated areas. Forbs will be broadcast planted with the grass seed during Autumn 2002. Forb species may include stalk-pod, crouching, and buckwheat milkvetch (*Astraglaus sclerocarpus*, *A. succumbens*, and *A. caricinus*), Balsamroot (*Balsamorhiza cayeyana*), hawksbeard (*Crepis atrabarba*), turpentine spring parsley (*Cymopteris terebinthinus*), Fleabanes such as *Erigeron filifolius*, *E. piperianus, E poliospermus, and E. pumilus*, wallflower (*Erysimum asperum*), sand beardtongue (*Penstemon accuminatus*) prairie clover (*Petalostemon ornatum*), Longleaf phlox (*Phlox longifolium*), scorpionweed (*Phacelia hastata*), globe mallow (*Sphaeralcea munroana*), and mariposa lily (*Calochortus macrocarpus*). Hanford Site derived seed of these species are currently in storage at Pacific Northwest National Laboratory.

5. PERFORMANCE STANDARDS

Performance standards are established to provide a benchmark to judge the success of the mitigation actions, or to establish a threshold to trigger implementation of contingency measures.

The following performance standards are defined:

- Sagebrush planting, if performed, will be considered successful if there is 60% survival of planted individuals after 5 years.
- The artificial burrowing owl nests will be considered successful if at least 5% of the burrows are used by burrowing owls on an annual basis.
- Rectification / revegetation plantings will be considered successful if there is a minimum of 10% total cover of the planted grass species after 5 years.

6. MONITORING PLAN

The artificial owl burrows will be inspected at least twice per year, once in the winter for maintenance and cleaning, and at least once in the nesting season to determine usage. This monitoring will continue for at least 5 years.

The grass planting / forb introduction areas will be monitored along permanent transects for at least 5 years post-planting. Monitoring will occur during years 1, 3, and 5 after planting. A modified Daubenmire plot technique (Bonham 1989) will be used.

Sagebrush plantings, if performed, will be monitored for at least 5 years post-planting. Monitoring will occur during years 1, 3, and 5 after planting. Survival will be monitored by following the fate of all individuals along a series of permanent transects.

The annual monitoring results will be publicly available by the end of September of each monitoring year.

DRAFT 9/16/02

7. SITE PROTECTION

All compensatory mitigation areas (owl burrows, forb introduction areas, and sagebrush planting areas) will be noted as mitigation areas on land-use and planning maps for the Hanford Site. Additionally, these areas will be physically delineated in the field, as needed, with chains, fences, or other means to prevent or minimize inadvertent intrusion or disturbance.

8. MAINTENANCE

All of the artificial burrows will be inspected each winter, and appropriate maintenance such as clearing out debris, repairing entrances, etc. will be conducted at that time.

HAMMER Operations will work with the appropriate Hanford Site organizations to control the spread of Rush skeleton weed (*Chondrilla juncea*) and other noxious weeds on the existing and expanded HAMMER Site.

9. CONTINGENCIES

If the performance standard for the sagebrush transplanting (i.e. 60% survival) is not met after any of the three monitoring events, enough additional tublings or bare-root plants will be obtained and planted such that a minimum of 600 surviving plants / ha (240/acre) will be present within the mitigation area.

If native grass coverage within the revegetated areas is below 10% after 5 years, the area will be over-seeded with additional native grass seed.

If, after 5 years, the artificial owl burrows have not been used, the distribution and placement of the burrows will be evaluated. If reasons for non-use can be determined the burrows may be moved or re-constructed to encourage use.

10.REFERENCES

Bonham, C. D. 1989. Measurements for Terrestrial Vegetation. J. A. Wiley and Sons, New York.

U.S. Department of Energy. 1996. Draft Hanford Site Biological Resource Mitigation Strategy. DOE/RL-96-88, U.S. Department of Energy-RL, Richland, Washington.

U.S. Department of Energy. 1999. Hanford Site Comprehensive Land Use Environmental Impact Statement. DOE/EIS-0222-F, U.S. Department of Energy-RL, Richland, Washington.

U.S. department of Energy. 2001. Hanford Site Biological Resources Management Plan. DOE/RL-96-32, U.S. Department of Energy-RL, Richland, Washington.

APPENDIX D

COMMENT AND RESPONSES

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Confederated Tribes and Bands
of the Yakama Indian Nation

Established by the
Treaty of June 9, 1855

July 17, 2002

Mr. Paul Dunigan, Jr.
U.S. Department of Energy
Richland Operations Office
P.O. Box 550
Richland, WA 99352

RE: Comments on *Draft Environmental Assessment (EA) for Expansion of the Volpentest Hazardous Materials Management and Emergency Response (Hammer) Training and Education Center, Hanford Site, Richland, Washington,* DOE/EA-1412

Dear Mr. Dunigan:

The Confederated Tribes and Bands of the Yakama Nation is a federally recognized sovereign pursuant to the Treaty of June 9, 1855 made with the United States of America (12 Stat. 951). As a sovereignty recognized by the U.S. Constitution, the Yakama Nation was not consulted on this proposed action that will impact Treaty reserved resources and rights on ceded lands. The cumulative impacts to these resources from this proposed action and other past and future actions diminish the resources available for future generations of the Yakama people to utilize as part of their culture. Because of that, compensatory mitigation is an essential component of this action for it to proceed.

Consultation
Under Section 7.0 of the EA, USDOE lists organizations consulted and includes the Yakama Nation. The Yakama Nation is not an organization but a federally recognized sovereign government and interactions must be conducted on a government-to-government basis. USDOE's trust responsibilities include consulting to the greatest extent practicable and to the extent permitted by law with tribal governments prior to taking actions that affect federally recognized tribal governments. Staff-to-staff interactions may precede government-to-government consultation. Unfortunately, this level of interaction was not even taken by USDOE in the development phase of this proposed action. Instead, USDOE-RL released the EA for public comment without any communication leading up to its release. This is not how consultation should work. Without communication, consultation is thwarted and a mutual decision is impossible. Establishing a government-to-government relation late in any process becomes awkward. Consultation on this action still needs to be initiated by USDOE-RL because USDOE-RL has a permanent legal obligation to exercise statutory and other authorities to protect tribal resources and treaty rights.

Transfer of Land
USDOE indicates in the document, under section 1.2.2, that it intends to transfer ownership of 80 acres of land for the National Utilities Training Services (NUTS) to the Northwest Public Power Association, which is a nonprofit association. This decision appears to violate transfer procedures under existing federal laws, such as the Federal

Post Office Box 151, Fort Road, Toppenish, WA 98948 (509) 865-5121

Property and Administrative Services Act of 1949 (FPASA). It also appears that USDOE may be attempting to transfer land that is public domain lands that were withdrawn from BLM. From the maps provided it is difficult to discern whether the proposed site overlays public domain lands. The proposed transfer does not meet the purposes of the Atomic Energy Act of 1954(AEA) that allows USDOE to dispose of such property for nuclear-related activities. The purpose of NUTS does not meet the requirements of the AEA for transfer and therefore would have to be transferred in accordance with the FPASA. By circumventing the federal transfer process, USDOE is preventing the Yakama Nation from procuring the property. From the purpose statement, the Yakama Nation sees no need for USDOE to transfer this land from federal ownership to a non-profit organization that may turn around and sell the property to a private individual or company, therefore, abrogating all rights that the Yakama Nation now retains. Consultation with the Yakama Nation is needed on this matter.

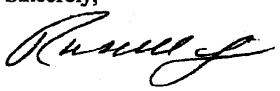
Alternatives
A reasonable range of alternatives has not been presented or analyzed in the EA to avoid impacting Tribal reserved resources and rights. For example, NUTS could be sited on Benton or Franklin County owned land or at an existing facility somewhere else in the country that is being under utilized and that could accommodate the need.

Impacts to Treaty Resources
This proposed action will significantly impact 210 acres of ceded Yakama Nation land and impact reserved Treaty resources and rights. Therefore, USDOE must include mitigation measures in the final decision. USDOE-RL needs to consult the Yakama Nation to cooperatively develop and reach agreement on appropriate mitigation measures for this proposed action prior to the issuance of the final decision, i.e. mitigated FONSI.

Conclusions
USDOE needs to initiate consultation with the Yakama Nation on this proposed action. Discussions need to include transfer of federal lands as proposed in the action, development of additional alternatives that may be more acceptable and reduce impacts to Tribal reserved resources and rights, and development of appropriate mitigation measures for those impacts that cannot be avoided.

Please contact me at (509) 452-2502, to initiate staff-to-staff discussions on this matter to determine whether our concerns can be resolved at that level or whether they need elevated to the government-to-government level.

Sincerely,



Russell Jim, Manager
ER/WM Program
Yakama Nation

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

02-SES-0365

Mr. Russell Jim, Manager
Environmental Restoration/
Waste Management Program
Confederated Tribes and Bands
of the Yakama Nation
2808 Main Street
Union Gap, Washington 98948

Dear Mr. Jim:

COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR EXPANSION OF THE VOLPENTEST HAZARDOUS MATERIALS MANAGEMENT AND EMERGENCY RESPONSE (HAMMER) TRAINING AND EDUCATION CENTER, HANFORD SITE, RICHLAND, WASHINGTON, DOE/EA-1412

Thank you for commenting on the subject EA and for meeting with us on September 4, 2002. We offer the following information in response to those comments:

Enclosed is a Mitigation Action Plan (MAP) that includes re-vegetating the area disturbed for construction of the Emergency Vehicle Operations Course (EVOC) with species native to the Hanford Site. A seed mixture, approved by Pacific Northwest National Laboratory/Ecology will be used on this project and any future projects undertaken by HAMMER. Forbs will be broadcast planted with the grass seed prior to mid March 2003. HAMMER Operations will construct and place 20 artificial burrowing owl nests at strategic locations throughout the unused portion of the EVOC site. HAMMER Operations will work with Hanford Site Operations, Transportation Services, to control the spread of rush skeleton, a Class B noxious weed, identified at the EVOC construction site. In the event HAMMER would need to remove sagebrush in an identified "sagebrush island," a sagebrush compensation will be completed with a planting ratio of 1.5:1. No current plans are expected to affect the existing sagebrush islands.

The Cold Test Facility (CTF) proposes mitigating their construction impacts by contributing funds that will be used to collect additional seeds from forbs species during the spring and summer of 2003, which will be broadcast seeded during the fall of 2003. The CTF construction site was largely in previously disturbed land (an abandoned borrow pit).

A letter of intent has been received from the Northwest Public Power Association (NWPPA) Director, National Utilities Training Services assuring their intent to keep and renew the natural vegetation to the best of their ability.

Mr. Russell Jim -2-
02-SES-0365

We will include the MAP as a supplement to the final EA.

We respect the sovereignty of the Yakama Nation and apologize for listing the Yakama Nation under organizations consulted. We will revise Section 7.0 accordingly in this EA and in future documents.

The land transfer to NWPPA is currently on hold, pending completion of the NEPA process. The legal authority under which the proposed transfer is proposed to take place is the Federal Property and Administrative Services Act of 1949 (40 U.S.C § 471, et seq), as amended. This Act gives to the Administrator of General Services, as the government's real property agent, the authority to assign property to the U.S. Department of Education for conveyance for educational public benefit. The U.S. Department of Education is authorized to make such a transfer by Section 484 (K) (1) of the Federal Property and Services Act of 1949, as amended (40 U.S.C.) 484 (k) (1).

The General Services Administration published a notice of surplus determination and availability to public agencies in February 2002. We recognize that this does not constitute consultation with the Yakama Nation. We will enter into consultation with the Yakama Nation early in the conceptual phase of any future proposed land transfers.

We found our staff-to-staff discussions very helpful. If you have any questions please contact me on (509) 376-6667, or Randy Small, Security and Emergency Services Division, on (509) 373-6290.

Sincerely,

Paul F. X. Dunigan Jr.
NEPA Compliance Officer

Enclosure
1. MAP

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

02-HMR-0023

JUN 14 2002

Mr. Patrick Sobotta, Director
Environmental Restoration/
Waste Management Program
Nez Perce Tribe
P.O. Box 365
Lapwai, Idaho 83540

Dear Mr. Sobotta:

DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR EXPANSION OF THE VOLPENTEST HAZARDOUS MATERIALS MANAGEMENT AND EMERGENCY RESPONSE (HAMMER) TRAINING AND EDUCATION CENTER, HANFORD SITE, RICHLAND, WASHINGTON (DOE/EA-1412)

As authorized by the U.S. Department of Energy's National Environmental Policy Act (NEPA) Implementing Procedures (10 CFR 1021), enclosed is the subject draft EA for your comments prior to July 22, 2002. Comments received after that date will be considered to the extent practicable.

Please direct any questions about this proposed action to Randy W. Small, HAMMER Team, on (509) 531-6584. Questions regarding the NEPA process may be directed to me on (509) 376-6667.

Sincerely,

Paul F. X. Dunigan, Jr.
NEPA Compliance Officer

HMR:RWS

Enclosure

cc w/o encl:
C. M. Borgstrom, EH-42
A. Fredin, CCT
R. Gay, CTUIR
R. Jim, YN
L. Seelatsee, Wanapum
K. (Kim) R. Welsch, FHO
Admin Record, H6-08

Nez Perce
ENVIRONMENTAL RESTORATION & WASTE MANAGEMENT
P.O. BOX 365 · LAPWAI, IDAHO 83540-0365 · (208) 843-7375 / FAX: 843-7378

July 2, 2002

Paul F. X. Dunigan, Jr.
NEPA Compliance Officer
U.S. Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

RE: Draft Environmental Assessment (EA) For Expansion of the Volpentest Hazardous Materials Management and Emergency Response (HAMMER) Training and Education Center, Hanford Site, Richland, Washington (DOE/EA-1412)

Dear Mr. Dunigan,

The Nez Perce Tribe's Environmental Restoration and Waste Management Program (ERWM) have reviewed the above-mentioned document.

Since 1855, reserved treaty rights of the Nez Perce Tribe in the Mid-Columbia have been recognized and affirmed through a series of Federal and State actions. These actions protect Nez Perce rights to utilize their usual and accustomed resources and resource areas in the Hanford Reach of the Columbia River and elsewhere. Accordingly, the Nez Perce Tribe's ERWM Program responds to actions that impact the Hanford ecosystem.

The ERWM has a history of supporting the mission and objectives of the HAMMER Training Facility and has been involved in various training and courses offered there. As a general comment we do not have any objections to the proposed expansion except for one stipulation noted below.

In the Appendices section there are two biological surveys that were conducted by PNNL in August 2001. Both surveys discuss the need for compensatory mitigation based on the Level III habitat found in the area and the fact that species of concern such as burrowing owls and loggerhead shrikes reside in the area.

The August 3rd survey specifically states that, "*a binding compensatory mitigation strategy with concurrence from PNNL Ecological Compliance staff and the cognizant RL technical monitor which addresses the above mentioned items is required before the ecological compliance review process is complete.*"

The ERWM concurs with this recommendation that some kind of revegetation or restoration activity be conducted as compensation for destroying 80 acres of shrub/steppe habitat. We could not find anywhere in this document where this kind of compensatory mitigation was discussed. The EA does indicate that part of the project was shifted slightly to minimize impacts to burrowing owls but we feel that more needs to be done based on guidance contained within the Hanford Biological Resource Management Action Plan (BRMaP).

It would seem that since this survey and recommendation was provided one year ago that there has been plenty of time to formulate a mitigation plan and/or strategy. We think it appropriate that such a plan should be included as an Appendix in this EA. Such a plan would provide information about the number of acres that would be revegetated, location, and composition of plant species.

One potential solution would be to team with the USFWS who are in the process of revegetating lands on the Hanford Reach National Monument as part of an ERDF compensatory mitigation effort. The HAMMER facility could provide funds to restore an additional 80-240 acres on the Monument.

If you have any questions please contact Dan Landeen of my staff at 208-843-7375.

Sincerely,

Patrick Sobotta
ERWM Director

Cc: Kevin Clarke
Laurie Vigue
Tom Zeilman
Greg Hughes
Larry Goldstein

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

02-SES-0364

OCT 17 2002

Mr. Patrick Sobotta, Director
Environmental Restoration/
Waste Management
Nez Perce Tribe
P.O. Box 365
Lapwai, Idaho 83540

Dear Mr. Sobotta:

COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR EXPANSION OF THE VOLPENTEST HAZARDOUS MATERIALS MANAGEMENT AND EMERGENCY RESPONSE (HAMMER) TRAINING AND EDUCATION CENTER, HANFORD SITE, RICHLAND, WASHINGTON, DOE/EA-1412

Thank you for commenting on the subject EA. We offer the following in response to those comments:

Enclosed is a Mitigation Action Plan (MAP) that includes re-vegetating the area disturbed for construction of the Emergency Vehicle Operations Course (EVOC) with species native to the Hanford Site. A seed mixture, approved by Pacific Northwest National Laboratory will be used on this project and any future projects undertaken by HAMMER. Forbs will be broadcast planted with the grass seed prior to mid March 2003. HAMMER Operations will construct and place 20 artificial burrowing owl nests at strategic locations throughout the unused portion of the EVOC site. HAMMER Operations will work with Hanford Site Operations, Transportation Services, to control the spread of rush skeleton, a Class B noxious weed, identified at the EVOC construction site. In the event HAMMER would need to remove sagebrush in an identified "sagebrush island," a sagebrush compensation will be completed with a planting ratio of 1.5:1. No current plans are expected to affect the existing sagebrush islands.

A letter of intent has been received from the Northwest Public Power Association Director, National Utilities Training Services assuring their intent to keep and renew the natural vegetation to the best of their ability.

Mr. Patrick Sobotta -2-
02-SES-0364 OCT 17 2002

RL will incorporate these planned mitigation measures into the final EA. If you have any questions you may contact me on (509) 376-6667, or contact Randy W. Small, of the Security and Emergency Services Division, on (509) 509 373-6290.

Sincerely,

Paul F. X. Dunigan Jr.
NEPA Compliance Officer

Enclosure
1. MAP

cc w/encl:
B. M Akers, FHI
L. S. Angerman, FHI
N. M. Menard, FHI
M. R. Sackshewsky, PNNL
N. M. Welsh, FHI

State of Washington
DEPARTMENT OF FISH AND WILDLIFE
Mailing Address: 600 Capitol Way N • Olympia, WA 98501-1091 • (360) 902-2200, TDD (360) 902-2207
Main Office Location: Natural Resources Building • 1111 Washington Street SE • Olympia, WA

July 9, 2002

Mr. Paul F.X. Dunigan, Jr.
NEPA Compliance Officer
U.S. Department of Energy
Richland Operations Office
P.O. Box 550
Richland, WA 99352

Dear Mr. Dunigan;

RE: DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR EXPANSION OF THE VOLPENTEST HAZARDOUS MATERIALS MANAGEMENT AND EMERGENCY RESPONSE (HAMMER) TRAINING AND EDUCATION CENTER, HANFORD SITE, RICHLAND, WASHINGTON (DOE/EA-1412)

The Washington Department of Fish and Wildlife (Department) has completed review of the expansion of the Hammer facility EA.

The mandate of the Department is to preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish in the state waters and offshore waters. Wildlife, fish, and shellfish are the property of the state (RCW 77.04.012). The goal of the Department's mitigation policy is to maintain the functions and values of fish and wildlife habitat, and we strive to protect the productive capacity and opportunities reasonably expected of a site in the future. In the long-term the Department shall seek a net gain in productive capacity of habitat through restoration, creation and enhancement.

The main concern the Department has with this EA is that no compensatory mitigation is being presented, despite the recommendations from Michael Sackschewsky, from Pacific Northwest National Laboratory. Mr. Sackschewsky makes the statement within a letter in Appendix B, "relatively high diversity of forbs and residual sprouting of bitterbrush following the fire indicates the area is recovering from the fire.... and small unburned sage 'islands' remain". This is important habitat for the two state candidate species observed during the field survey, burrowing owl and loggerhead shrike. Shrub steppe is a priority habitat for the Department.

Mr. Paul F.X. Dunigan, Jr.
July 9, 2002
Page 2

The loggerhead shrike is also a state listed candidate species as well as a federal species of concern. The WDFW references used in the Sackschewsky letter, Appendix B, are outdated. In the future, we recommend that DOE obtain the most updated priority habitats and species list from the Department prior to completing a field survey. Additionally, the Department recommends that species surveys be completed between April and June in order to capture more nesting species.

The timing restrictions for protecting the burrowing owl are inadequate in this EA. Our PHS guidelines for burrowing owl recommends a timing restriction, from human disturbance, from March 15 through August 15, and this timing restriction would also help other species nesting in the area (M. Vander Haegen, pers.comm). The ecological characteristics of areas used by burrowing owls should be maintained which includes preserving areas of native vegetation and protection of species providing nesting habitat for burrowing owls.

The Department believes compensatory mitigation is appropriate for 80 acres of shrub steppe habitat impacted by this project, given this "recovering habitat" is providing habitat for two stated listed species. Adjusting the site to accommodate a nesting burrowing owl is not adequate mitigation. A map that illustrates how the site was reconfigured to avoid the burrowing owl nest was not provided within this EA. As indicated in Hanford Site Biological Resources Management Plan (BRMaP), level III biological resource requires compensatory mitigation.

The EA did not indicate that any rare plant surveys were performed at this site. Given the number of remnant islands of shrub steppe habitat on this site, a rare plant survey should be completed. Is there going to be a hazardous spill prevention plan created for this site? It would seem appropriate in order to protect ground water from future spills of hazardous substances.

I can be reached at (360) 902-2425 if you have any questions. Thank you.

Sincerely,

Lauri Vigue
Fish and Wildlife Biologist

Cc: Larry Goldstein, WDOE
Tom Zeilman, Yakama Indian Nation
Tom O'brien, USFWS
Dan Landeen, Nez Perce Tribe
Ted Clausing, WDFW

Mr. Paul F.X. Dunigan, Jr.
July 9, 2002
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Personal Communication

Matt Vander Haegen, Research Scientist
Wildlife Program
Washington State Department of Fish and Wildlife
600 Capitol Way North
Olympia, Wa 98501

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

02-SES-0363

OCT 17 2002

Ms. Laurie Vigue
Fish and Wildlife Biologist
State of Washington
Department of Fish and Wildlife
600 Capital Way North
Olympia, Washington 98501

Dear Ms. Vigue:

COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR EXPANSION OF THE VOLPENTEST HAZARDOUS MATERIALS MANAGEMENT AND EMERGENCY RESPONSE (HAMMER) TRAINING AND EDUCATION CENTER, HANFORD SITE, RICHLAND, WASHINGTON, DOE/EA-1412

Thank you for commenting on the subject EA. We offer the following in response to those comments:

Enclosed is a Mitigation Action Plan (MAP) that includes re-vegetating the area disturbed for construction of the Emergency Vehicle Operations Course (EVOC) with species native to the Hanford Site. A seed mixture, approved by Pacific Northwest National Laboratory will be used on this project and any future projects undertaken by HAMMER. Forbs will be broadcast planted with the grass seed prior to mid March 2003. HAMMER Operations will construct and place 20 artificial burrowing owl nests at strategic locations throughout the unused portion of the EVOC site. HAMMER Operations will work with Hanford Site Operations, Transportation Services, to control the spread of rush skeleton, a Class B noxious weed, identified at the EVOC construction site. In the event HAMMER would need to remove sagebrush in an identified "sagebrush island," a sagebrush compensation will be completed with a planting ratio of 1.5:1. No current plans are expected to affect the existing sagebrush islands.

A letter of intent has been received from the Northwest Public Power Association Director, National Utilities Training Services assuring their intent to keep and renew the natural vegetation to the best of their ability.

Ms. Laurie Vigue -2- OCT 17 2002
02-SES-0363

RL has provided your comments regarding obtaining the most up to date priority habitats and species lists prior to completing a field survey to our survey personnel, and will incorporate the MAP into the final EA. If you have any questions, you may contact me on (509) 376-6667, or Randy Small, Security and Emergency Services Division, on (509) 373-2690.

Sincerely,

Paul F. X. Dunigan Jr.
NEPA Compliance Officer

Enclosure
1. MAP

cc w/encl:
B. M Akers, FHI
L. S. Angerman, FHI
N. M. Menard, FHI
M. R. Sackshewsky, PNNL
N. M. Welsh, FHI

Telephoned Comment from Oregon Department of Energy

June 12, 2002 from Dirk, Dunning, Oregon Department of Energy to Paul F. X. Dunigan, Jr, DOE-RL

Comment:
Page 4-3, Section 4.2.4 The statement concerning "state candidate species" doesn't square with statements in Section 5.1.10 or with the Hanford Solid Waste EIS list of candidate species which show both burrowing owls and loggerhead shrikes as Washington State candidate species.

Response:
The discussions will be made consistent to reflect the candidate status of these species.