

## CATEGORICAL EXCLUSION

### COMBINED COMMUNITY COMMUNICATIONS FACILITY RELOCATION PROJECT – GABLE MOUNTAIN FACILITIES HANFORD SITE, RICHLAND, WASHINGTON

#### PROPOSED ACTION

It is proposed that new *Worldwide Interoperability for Microwave Access* (WiMAX) radio systems be deployed at strategic locations across the Hanford Site to achieve fixed, nomadic, and mobile communication coverage (i.e., data, video, and voice). This will be accomplished by extending wireless infrastructure connectivity where it is not feasible to route physical infrastructure and avoid further land disturbance. In addition, the proposed action will enhance the Hanford Site safety and security communications capabilities to meet mission requirements.

It is anticipated that WiMAX base stations (radio infrastructure) will be placed at three strategic locations to achieve a portion of the required overall site-wide communications coverage. These include Rattlesnake Mountain, Gable Mountain - East (623B), and Gable Mountain - West (630). The WiMAX radio systems will be installed in existing facilities. The feed lines will be routed on existing cable spans entering the building and antenna panels will be installed on existing metal towers or wooden poles.

Proposed communications system upgrades on Rattlesnake Mountain are addressed in DOE/EA-1660F, *"Final Environmental Assessment for the Combined Community Communication Facility and Infrastructure Cleanup on the Fitzner/Eberhardt Arid Lands Ecology Reserve, Hanford Site, Richland, Washington"* (CCCF-EA) and associated *Finding Of No Significant Impact* (FONSI). This categorical exclusion addresses that portion of the WiMAX communications system upgrades located on Gable Mountain; including relocation of communications equipment from 623-A on Rattlesnake Mountain to the Gable Mountain facilities, as required.

#### LOCATION OF ACTION

The location of the proposed action is near the 623-B Backup Radio Repeater Facility on the east side of Gable Mountain and the 630 Plant Microwave Tower/Equipment Facility on the west side of Gable Mountain. Gable Mountain covers approximately 14 square kilometers, reaching elevations of 330 and 339 meters on the eastern and western summits, respectively. Gable Mountain and Gable Butte are two ridges located north of the 200 Area Central Plateau that form the only extensive outcrops of the Columbia River Basalt Group in the central portion of the Pasco Basin. Figure 1 depicts the general location of the proposed action on Gable Mountain.



## DESCRIPTION OF PROPOSED ACTION

General work descriptions pertaining to the proposed action on Gable Mountain are provided below. Work proposed on Rattlesnake Mountain is covered under the CCCF-EA and associated FONSI.

**623A – Rattlesnake Mountain:** This work scope involves the removal of existing radio systems from inside of the 623A repeater facility for relocation on Gable Mountain. No new installation or outside work is anticipated at the 623-A facility.

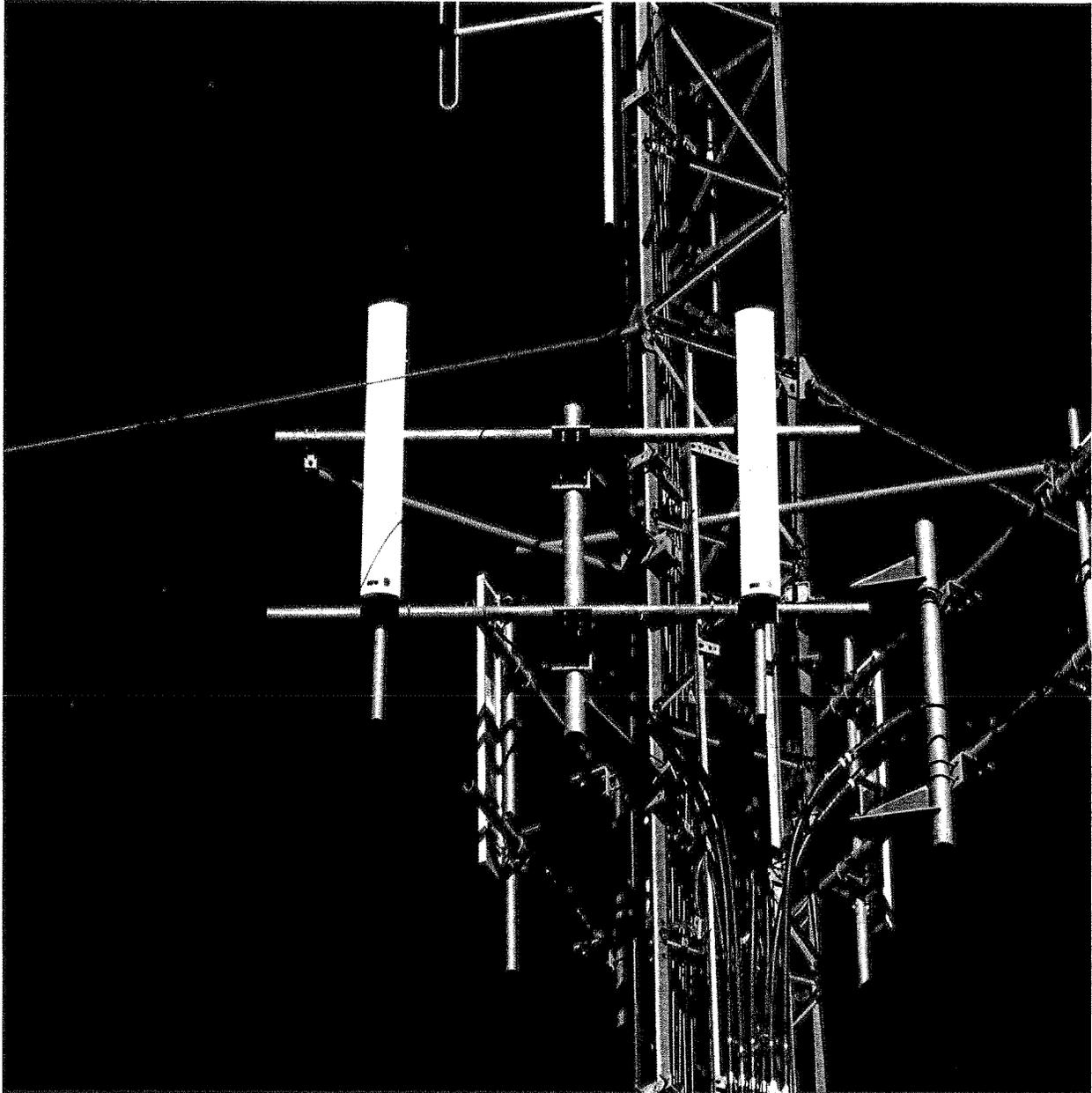
**623B – Gable East Site:** This work scope involves installation of WiMAX radio systems inside the 623-B repeater facility, routing/lashing feed line between the facility and the existing wooden pole, and installing WiMAX antenna panels (3 antennas at 6-inches wide x 2-feet tall) on the wooden pole. The wooden pole is located approximately 100-feet east of the 623-B facility. Upon structural integrity validation, the wooden pole will be utilized to avoid building new tower support infrastructure at this site. Also, to minimize visual impacts, the existing wooden pole will be reduced in height from 60-feet to 40-feet. No excavation or ground disturbance is anticipated as part of this work scope. Figure 2 depicts a typical WiMAX antenna panel installation. Figure 3 depicts the 623-B building and existing wooden pole.

**630 – Gable West Site:** This work scope involves installing WiMAX radio systems inside the 630 repeater facility, routing/lashing feed line between the facility and the existing 30-foot tall metal tower (adjacent to the 630 building), and installing WiMAX antenna panels (3 antennas at 6-inches wide x 2-feet tall) on the metal tower. The metal tower will be utilized to avoid building new tower support infrastructure at this site. No excavation or ground disturbance is anticipated as part of this work scope. Figure 4 depicts the 630 building and existing metal tower.

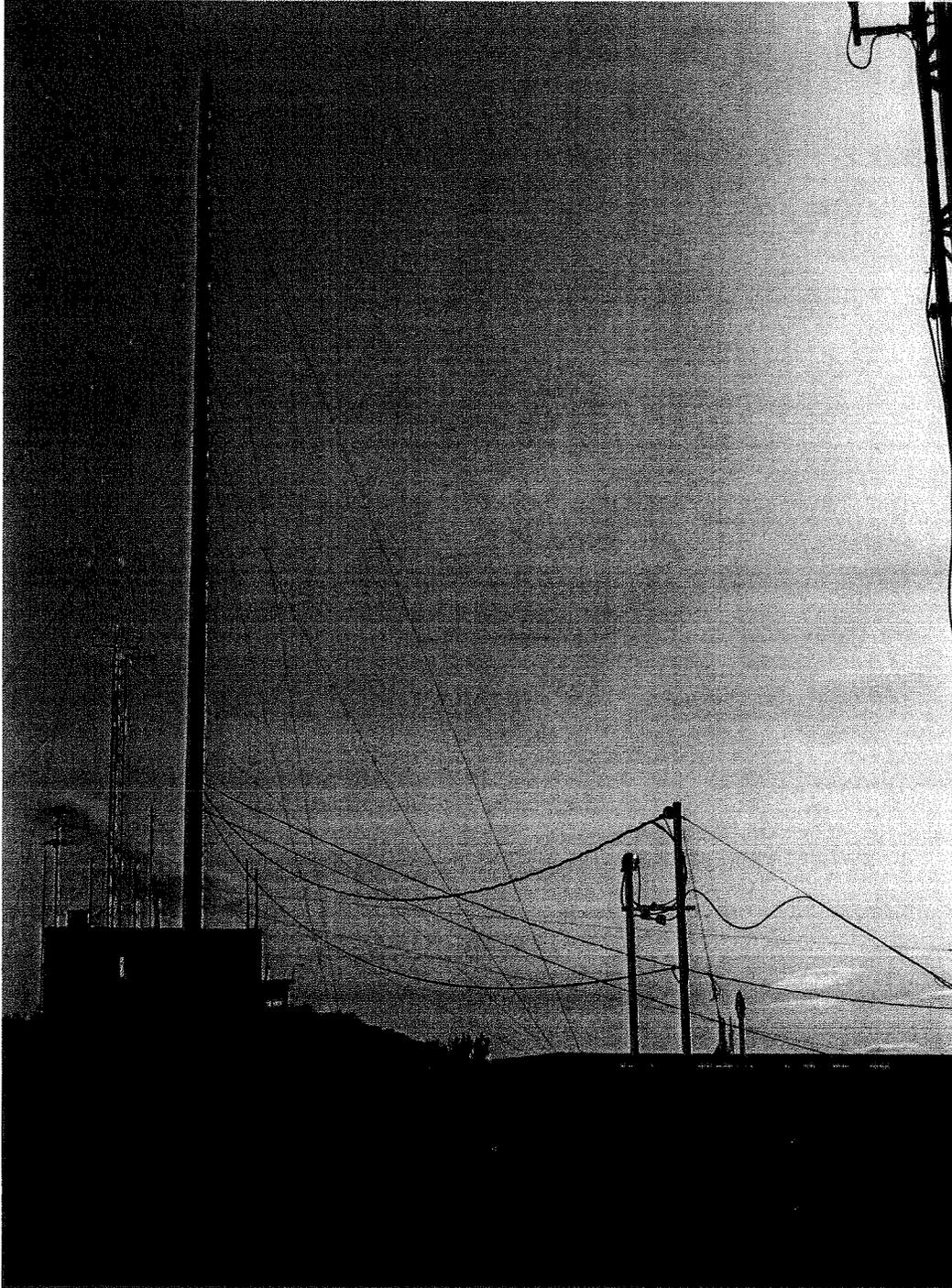
## CATEGORICAL EXCLUSION TO BE APPLIED

The Categorical Exclusion (CX) listed in Title 10, Code of Federal Regulations (CFR) 1021, *National Environmental Policy Act Implementing Procedures*, Subpart D, Appendix B that will be applied to the WiMAX communications system upgrades on Gable Mountain is B1.19. The authority for the regulation is 42 U.S.C. 7101 *et seq.*; 42 U.S.C. 4321 *et seq.*; and 50 U.S.C. 2401 *et seq.* The source for the regulation is 57 FR 15144, April 24, 1992, unless otherwise noted. Application of CX B1.19 is discussed further in the section entitled, “Eligibility Criteria.”

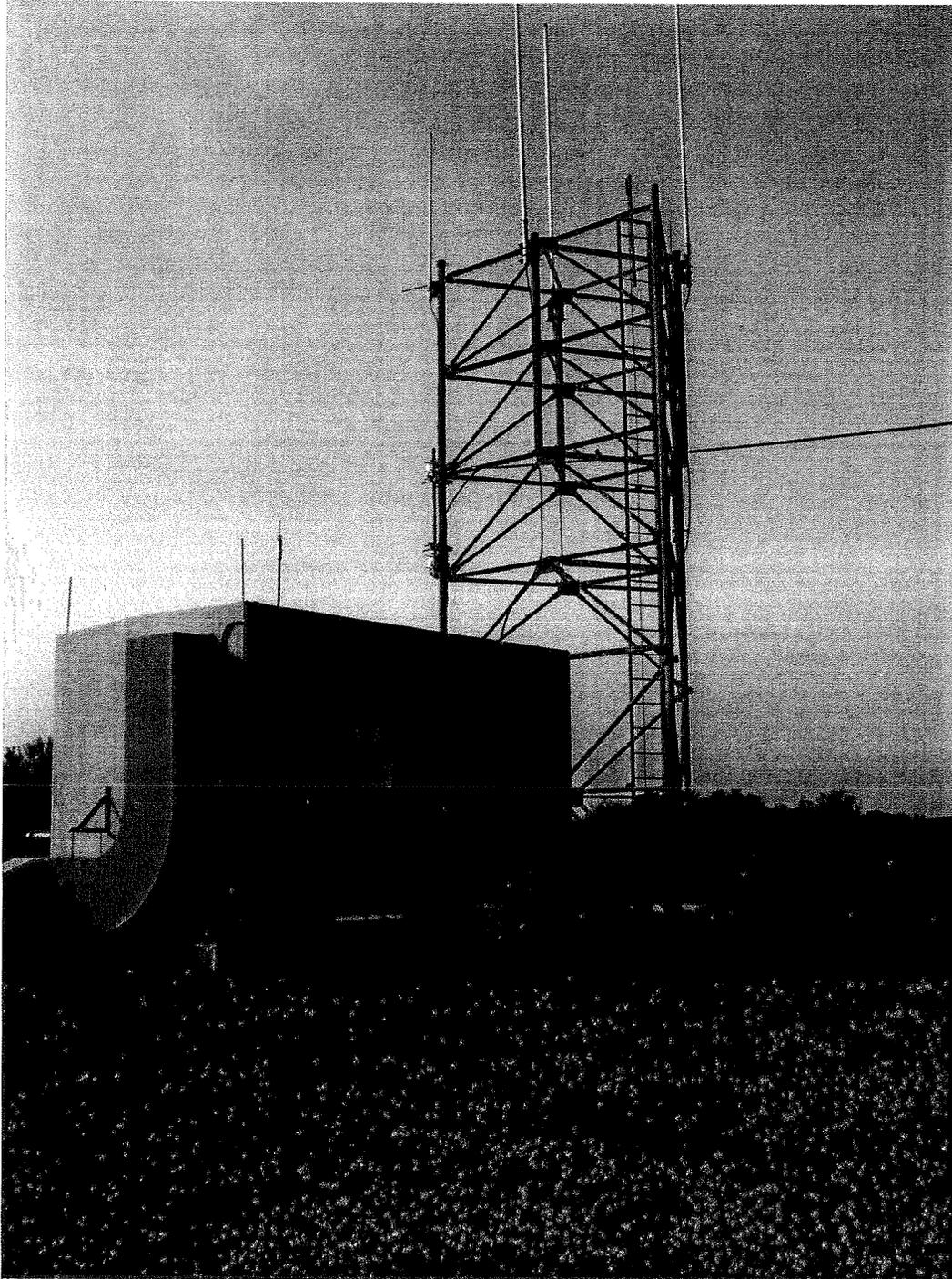
*B1.19 - Siting, construction, and operation of microwave and radio communication towers and associated facilities, if the towers and associated facilities would not be in an area of great visual value.*



**FIGURE 2. EXAMPLE OF TYPICAL ANTENNA PANEL INSTALLATION**



**FIGURE 3. 623-B BUILDING AND WOODEN POLE – EAST SIDE OF GABLE MOUNTAIN**



**FIGURE 4. 630 BUILDING AND METAL TOWER - WEST SIDE OF GABLE MOUNTAIN**

## ELIGIBILITY CRITERIA

In applying categorical exclusions under the provisions of 10 CFR 1021.410(b) to specific proposed actions, DOE must determine that:

- (1) The proposal fits within a class of actions that is listed in Appendix A or B to Subpart D of the regulation;
- (2) There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal. Extraordinary circumstances are unique situations presented by specific proposals, such as scientific controversy about the environmental effects of the proposal; uncertain effects or effects involving unique or unknown risks; or unresolved conflicts concerning alternate uses of available resources within the meaning of section 102(2)(E) of NEPA; and
- (3) The proposal is not “connected” [40 CFR 1508.25(a)(1)] to other actions with potentially significant impacts, is not related to other proposed actions with cumulatively significant impacts [40 CFR 1508.25(a)(2)], and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 of the regulation.

The proposed action fits within the class of actions described in 10 CFR 1021, Subpart D, Appendix B, CX B1.19. There are no extraordinary circumstances that affect the significance of the environmental effects of the proposed action. Since Gable Mountain is considered a traditional cultural property on the Hanford Site, proposed communications system upgrades were designed in accordance with applicable requirements of the *Gable Mountain and Gable Butte Resource Management Plan*. Furthermore, the *Memorandum of Agreement/Treatment Plan* between the Department of Energy and State Historic Preservation Office, with local Native American Tribes as concurring parties, was formally amended and approved to address the proposed action. The proposed action is not connected to other actions with potentially significant impacts, is not related to other proposed actions with cumulatively significant impacts, and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211.

The proposed action fits within the class of actions listed in 10 CFR 1021, Subpart D, Appendix B, CX B1.19, as discussed above. For classes of actions listed in Appendix B, the following conditions are integral elements to fit within the class that must be addressed:

<b>INTEGRAL ELEMENTS 10 CFR 1021, SUBPART D, APPENDIX B</b>	
<b>Would the Proposed Action:</b>	<b>Comment or explanation:</b>
Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including requirements of DOE and/or Executive Orders?	No. Applicable laws, statutory, regulatory, permit requirements for environmental safety and health; including requirements of DOE and/or Executive Orders, will not be violated by the proposed action.
Require siting and construction or major expansion of waste storage, disposal, recovery or treatment facilities (including incinerators)? The proposal may include categorically excluded waste storage, disposal, recovery or treatment actions.	No. The proposed action will not require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities.
Disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases?	No. The proposed action will not disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products if they existed. There will be no uncontrolled or unpermitted releases.
Adversely affect environmentally sensitive resources including, but not limited to: (i) Property (e.g., sites, buildings, structures, objects) of historic, archaeological, or architectural significance designated by Federal, state, or local governments or property eligible for listing on the National Register of Historic Places; (ii) Federally-listed threatened or endangered species or their habitat (including critical habitat), Federally-proposed or candidate species or their habitat or state-listed endangered or threatened species or their habitat; (iii) Wetlands regulated under the Clean Water Act (33 U.S.C. 1344) and floodplains; (iv) Federally- and state-designated wilderness areas, national parks, national natural landmarks, wild and scenic rivers, state and Federal wildlife refuges, and marine sanctuaries; (v) Prime agricultural lands; (vi) Special sources of water (such as sole-source aquifers, wellhead protection areas, and other water sources that are vital in a region); (vii) Tundra, coral reefs, or rainforests?	<p>No. The proposed action will not adversely affect environmentally sensitive resources. Gable Mountain is considered a traditional cultural property on the Hanford Site. Proposed communications system upgrades were designed in accordance with applicable requirements of the Gable Mountain and Gable Butte Resource Management Plan. Furthermore, the Memorandum of Agreement/Treatment Plan between the Department of Energy and State Historic Preservation Office, with local Native American Tribes as concurring parties, was formally amended and approved to address the proposed action.</p> <p>Based on the ecological resources review, there will be no adverse impacts on federally-listed threatened or endangered species, federally-proposed or candidate species, state-listed species, or their habitat.</p> <p>There will be no adverse impacts of the proposed action on wetlands and floodplains; federal/state designated wilderness areas, national parks, national landmarks, wild/scenic rivers, wildlife refuges, or marine sanctuaries; prime agricultural lands; special water sources or wellhead protection areas; tundra, coral reefs, or rainforests.</p>

## **CULTURAL AND ECOLOGICAL RESOURCES REVIEW**

### **Cultural Resources Review**

Gable Mountain and Gable Butte are prominent features of the central Hanford Site landscape and are highly revered by Native American Tribes with historical ties to the Hanford Site. Gable Mountain and Gable Butte are considered sacred sites and are used periodically by local Tribes for ceremonies, spirit questing, and other cultural practices.

Gable Mountain was listed on the Washington State Register of Historic Places as an archaeological district in 1974. Sixteen sites were recorded in 1987 to complete the National Register nomination of Gable Mountain. Gable Mountain was determined eligible for the National Register in 1990 as part of the Gable Mountain and Gable Butte Cultural District.

Since Gable Mountain is considered a traditional cultural property, the proposed communications system upgrades were designed in accordance with applicable requirements of the *Gable Mountain and Gable Butte Resource Management Plan*. Furthermore, the *Memorandum of Agreement/Treatment Plan* between the Department of Energy and State Historic Preservation Office, with local Native American Tribes as concurring parties, was formally amended and approved to address the proposed action. The approved amendment to the *Memorandum of Agreement/Treatment Plan* is attached.

Workers will be directed to watch for cultural materials (e.g., bones, artifacts, etc.) during all work activities. If any cultural materials are encountered, work in the vicinity of the discovery will stop and a qualified cultural resources specialist will be notified to assess the significance of the find, and if necessary, arrange for mitigation of impacts to the find.

### **Ecological Resources Review**

Pedestrian and visual reconnaissance surveys of the proposed action site were performed by the Ecological Monitoring and Compliance Project on April 22, 2010, to ensure there are no adverse impacts to protected species, priority habitats, or other biological or ecological resources of concern as a result of the proposed action. A copy of the ecological resources review will be maintained by the Ecological Monitoring and Compliance Project and also maintained in the proposed action project file.

The proposed action will be implemented in areas previously disturbed by construction activities associated with the existing communications system buildings, metal towers, and wooden poles. The proposed action is not likely to result in adverse ecological or biological impacts. However, there is a potential for ground nesting birds, such as killdeer or common nighthawks, to use the open dirt/gravel patches scattered over the proposed action site.

The proposed action will be conducted in a manner to avoid spreading noxious weeds into non-infested areas. Also, if any nesting birds are encountered or bird defensive behaviors are noted, a

qualified Hanford Site biological resources specialist will be contacted for further consultation and direction.

### **Potential Environmental Impacts Considered**

The following checklist summarizes environmental impacts that were considered:

#### **IMPACT TO AIR**

	Would the proposed action:	YES	NO
1.	Result in more than minor and temporary gaseous discharges to the environment?		X
2.	Release other than nominal and temporary particulates or drops to the atmosphere?		X
3.	Result in more than minor thermal discharges?		X
4.	Increase offsite radiation dose to >0.1 mrem (40 CFR 61 Subpart H)?		X

#### **IMPACT TO WATER**

	Would the proposed action:	YES	NO
5.	Discharge any liquids to the environment?		X
6.	Discharge heat to surface or subsurface water?		X
7.	Release soluble solids to natural waters?		X
8.	Provide Interconnection between aquifers?		X
9.	Require installation of wells?		X
10.	Require a Spill Prevention Countermeasure and Control Plan (40 CFR 112 and 761)?		X
11.	Violate water quality standards (WAC 713-200, Table 1)?		X

#### **IMPACT TO LAND**

	Would the proposed action:	YES	NO
12.	Conflict with existing zoning or land use?		X
13.	Involve hazardous, radioactive, PCB, or asbestos waste?		X
14.	Cause erosion?		X
15.	Require an excavation permit?		X
16.	Disturb an undeveloped area?		X

#### **GENERAL**

	Would the proposed action:	YES	NO
17.	Disturb Arid Lands Ecology or Wahluke Slope Reserves?		X
18.	Cause other than a minor increase in noise level?		X
19.	Make a long-term commitment of large quantities of nonrenewable resources?		X
20.	Require new utilities or modifications to utilities?		X
21.	Use pesticides, carcinogens, or toxic chemicals?		X
22.	Require a radiation work permit?		X

**DETERMINATION**

Based on my review of information conveyed to me and in my possession concerning the proposed action, as NEPA Compliance Officer authorized under DOE Order 451.1A, I have determined that the proposed action fits within the specified class of actions described in 10 CFR 1021, Subpart D, Appendix B, CX B1.19 and satisfies the requirements of 10 CFR 1021.410(b). The proposed action is hereby categorically excluded from further NEPA review.



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R. W. Russell III, NEPA Compliance Officer  
Environmental Compliance Division  
DOE-Office of River Protection



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Date

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