

**CATEGORICAL EXCLUSION****LIMITED PRESCRIBED BURNING ON THE HANFORD SITE DURING JANUARY,  
FEBRUARY, MARCH AND APRIL OF 2010 TO MAINTAIN CRITICAL FIRE  
BREAKS****HANFORD SITE, BENTON COUNTY, WASHINGTON****PROPOSED ACTION**

The U.S. Department of Energy (DOE), Richland Operations Office (RL) proposes to conduct limited prescribed burning of approximately 200 acres of designated areas on the Hanford Site during the 2010 January, February, March and April time period. Prescribed burning will help to maintain critical fire breaks along several Hanford Site roadways and the fenced perimeter of several major operating areas as described herein. Prescribed burning will be conducted in a deliberate and controlled manner by the Hanford Fire Department.

**LOCATION OF ACTION**

Prescribed burning activities are proposed in limited areas along Route 4 South, Route 4 North, Route 10, Route 2 South, and Route 2 North. of the Hanford Site where ignitable fuel has tended to accumulate. Proposed burning activities also include the fenced perimeter of 200 East Area, 200 West Area, and Energy Northwest's Columbia Generating Station where ignitable fuel have accumulated. The attached map entitled "*Critical Prescribed Burning Areas to Maintain Fire Breaks*" depicts the limited prescribed burning locations proposed under this CX. The total area is approximately 200 acres or about 10 to 15 percent of the total fire break area maintained by the Hanford Fire Department in accordance with its *Hanford Site 2009 Wildland Fire Management Plan*.

**DESCRIPTION OF PROPOSED ACTION**

The objective of limited prescribed burning under this *Categorical Exclusion* (CX) is to help maintain critical fire breaks by reducing the accumulation of potentially ignitable fuel (i.e., tumbleweeds). Prescribed burning is a controlled fire ignited by Hanford Fire Department personnel in accordance with an approved burn plan, burn permit, and specific environmental conditions (e.g., temperature, relative humidity, wind direction, wind speed, and fuel moisture). These controlled fires are designed to reduce the intensities and rates of spread of potential wildland fires by eliminating ignitable fuel that has accumulate along roadsides and facility perimeter fencing. The purpose of prescribed burning is to employ fire strategically as a preventive measure to maintain critical fire breaks thereby protecting Hanford Site personnel,

buildings, structures, equipment, and infrastructures from wildland fires at minimum impact to the environment and acceptable cost.

HNF-8599, Revision 8, *Hanford Site 2009 Wildland Fire Management Plan* is the operational guide for managing wildland fire and prescribed burning activities on the Hanford Site. This plan describes wildland fire fighting and prescribed burning strategies; defines the level of activities required to ensure protection of personnel, facilities, equipment, and infrastructures; and discusses the restoration and perpetuation of natural ecological processes on the Hanford Site to mitigate the impacts of wildland fires. Proposed prescribed burning activities are preventive measures to help maintain critical fire breaks as one element of the overall Hanford Site wildland fire management strategy.

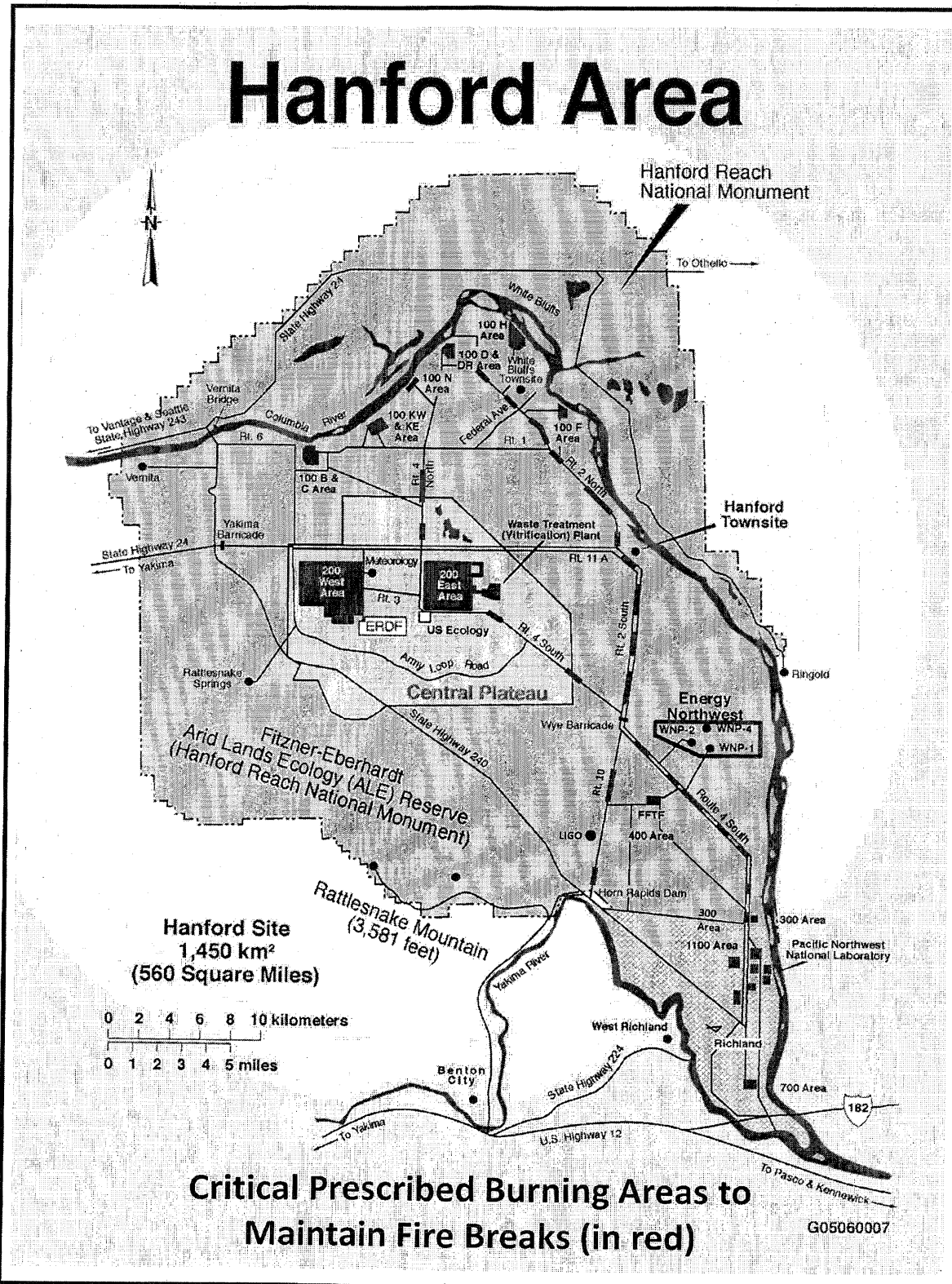
Typically, a critical fire break is defined as an area void of wildland fire fuel at least 100-feet or more in width. Most of the major Hanford Site roadways meet this criterion; however, vegetative fuel (naturally occurring and wind-blown) infringes on the critical fire breaks necessitating routine maintenance by prescribed burning to preclude ignition that can result from vehicular traffic and subsequent wildland fires. Critical fire breaks not meeting the 100-foot wide criterion are either mechanically manipulated with equipment (i.e., road grading) or are burned (i.e., black lining) to ensure the maintenance of critical fire breaks before and during the wildland fire season.

As part of the authority granted to the DOE field offices to approve prescribed burning plans, notification is made to the DOE-Headquarters Emergency Operations Center and Lead Program Secretarial Officer, as appropriate, for any prescribed burning conducted on the Hanford Site. The Hanford Fire Department also notifies the Occurrence Notification Center and DOE-RL Office of Security and Emergency Services whenever prescribed burning activities are scheduled on the Hanford Site. This notification initiates contact with DOE-Headquarters and allows the Hanford Fire Department to move ahead with prescribed burning as planned.

#### **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 prescribed burning activities described herein is B1.3. 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 B1.3 to prescribed burning activities is discussed further in the section entitled, "Eligibility Criteria."

# Hanford Area



*B1.3 - Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (e.g., pathways, roads, and railroads), vehicles and equipment, and localized vegetation and pest control, during which operations may be suspended and resumed. Custodial services are activities to preserve facility appearance, working conditions, and sanitation, such as cleaning, window washing, lawn mowing, trash collection, painting, and snow removal. Routine maintenance activities, corrective (that is, repair), preventive, and predictive, are required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable for a facility to be used for its designated purpose. Routine maintenance may result in replacement to the extent that replacement is in kind and is not a substantial upgrade or improvement. In kind replacement includes installation of new components to replace outmoded components if the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of a major component that significantly extends the originally intended useful life of a facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life).*

#### **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 §1021.211 of the regulation.

There are no extraordinary circumstances that may affect the significance of the environmental effects of the prescribed burning activities described herein. Also, the prescribed burning activities are not connected to other actions with potentially significant impacts, are not related to other proposed actions with cumulatively significant impacts, and are not precluded by 40 CFR 1506.1 or 10 CFR 1021.211.

The limited prescribed burning activities proposed under this CX are intended to maintain critical fire breaks along portions of several major Hanford Site roadways and around the fenced perimeter of several major operating areas. The limited prescribed burning activities are intended

as preventive measures to control potential wildland fire hazards and protect buildings, structures, equipment, and infrastructures to enable their undisrupted use for designated purposes.

The prescribed burning activities fit within the class of actions listed in 10 CFR 1021, Subpart D, Appendix B, CX B1.3, 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>	
Would the Proposed Action:	Comment or explanation:
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, regulations, or orders will not be violated by the proposed action. The proposed action will minimize the potential for wildland fires on the Hanford Site thereby protecting personnel, facilities, equipment, infrastructures; and cultural, historic, and ecological resources. The proposed activities will be conducted in accordance with an approved burn plan, burn permit, and specific environmental conditions.
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.	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?	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: <ul style="list-style-type: none"> <li>(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;</li> <li>(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;</li> <li>(iii) Wetlands regulated under the Clean Water Act</li> </ul>	<p>The proposed action will not adversely affect environmentally sensitive resources. The proposed action will help to protect property of historic, archaeological, architectural, cultural, and ecological significance by reducing the potential for wildland fires. The proposed action is required to maintain critical fire breaks and will be conducted in previously disturbed and burned areas. Cultural/Historic and Ecological Resource Reviews will be performed prior to conducting the proposed action, as needed.</p> <p>Minimum impact suppression tactics (MIST) will be used to protect cultural and ecological resources. Furthermore, the Hanford Fire Department will implement 10 Fire Orders, 18 Watch-Out Situations, and LCES concepts (lookouts, communications, escape zones, and safety zones) to ensure the safety of the</p>

<p>(33 U.S.C. 1344) and floodplains;</p> <p>(iv) Federally- and state-designated wilderness areas, national parks, national natural landmarks, wild and scenic rivers, state and Federal wildlife refuges, and marine sanctuaries;</p> <p>(v) Prime agricultural lands;</p> <p>(vi) Special sources of water (such as sole-source aquifers, wellhead protection areas, and other water sources that are vital in a region);</p> <p>(vii) Tundra, coral reefs, or rainforests?</p>	<p>firefighters and control escape fires.</p> <p>There will be no impacts of the proposed action on wetlands, floodplains, federal/state designated areas (wild and scenic rivers, national monuments and Federal wildlife refuges), prime agricultural lands, special water sources, tundra, coral reefs, or rainforests.</p>
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## CULTURAL AND BIOLOGICAL RESOURCES REVIEW

### Cultural Resources Review

The limited areas designated for prescribed burning under this CX to maintain critical fire breaks on the Hanford Site are in previously disturbed and burned areas along portions of several major Hanford Site roadways and perimeter fencing around several major operating areas. The areas (approximately 200 acres) have been reviewed for cultural resources and none exist. The proposed action described in this CX is not considered the type of undertaking with the potential to cause effects to cultural resources.

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 until a qualified Hanford Site cultural resources specialist has been notified, assessed the significance of the find, and if necessary, arranged for mitigation of the impacts to the find.

### Biological Resources Review

Areas designated for prescribed burning activities under this CX to maintain critical fire breaks on the Hanford Site are in previously disturbed and burned areas along portions of several major Hanford Site roadways and perimeter fencing around several major operating areas. Continued burning in these previously disturbed and burned areas to remove wildland fire fuel is not considered the type of undertaking that will affect biological resources.

However, given the seasonal dependency of biological resources, proposed fire breaks will be reviewed for biological resources by qualified Hanford Site biological resources specialists prior to conducting prescribed burning. The review will ensure there are no adverse impacts to protected species, priority habitats, or other biological resources of concern as a result of the prescribed burning.

Prescribed burning activities will be conducted in a manner to avoid spreading noxious weeds into non-infested areas of the Hanford Site. 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.

### 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

\*NOTE: Prescribed burning will be conducted in accordance with a burn permit issued by the Benton Clean Air Agency and be subject to the terms and conditions contained therein. Prescribed burning will also be conducted in accordance with an approved burn plan.

#### 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

\*\*NOTE: Foam and/or water may be used for fire control measures. Impacts to surface water, ground water, or violation of water quality standards are not envisioned.

**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 activities fit within the specified class of actions described in 10 CFR 1021, Subpart D, Appendix B, CX B1.3 and satisfies the requirements of 10 CFR 1021.410(b). The proposed action is hereby categorically excluded from further NEPA review.





1/13/10

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

Date

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