# CATEGORICAL EXCLUSION MODIFICATIONS TO THE MAINTENANCE AND STORAGE FACILITY 400 AREA, HANFORD SITE, RICHLAND, WASHINGTON

# CATEGORICAL EXCLUSION FOR MODIFICATIONS TO THE MAINTENANCE AND STORAGE FACILITY 400T AREA, HANFORD SITE, RICHLAND, WASHINGTON

# **Proposed Action**

The U.S. Department of Energy, Richland Operations Office (RL), needs to modify the existing Maintenance and Storage Facility (MASF) for cold mock-up testing to support Hanford Site sludge disposition.

#### Location of Action

400 Area, Hanford Site, Richland, Washington (Figure 1).

# **Description of Proposed Action**

The proposed action would modify the existing MASF to accommodate cold mock-up testing.

The Sludge Treatment Project (STP) Test Program serves the purpose of satisfying DOE-RL's expectation to confirm technology and supporting design readiness of systems and components before being deployed for the removal of sludge from the 105-K West Basin and treatment of the sludge. The STP Test Program identifies time-phased scope consistent with key Project design stages (i.e., conceptual, preliminary, and final) and is aligned with the DOE decision and approval process (i.e., Critical Decision (CD) stages). Testing would be conducted at MASF. Appropriately scaled tests will be conducted using non-radioactive simulants bounding expected K Basin sludge physical properties. Scale of tests can include laboratory scale, bench scale, or full size.

Sludge simulants will be slurry mixture of water from the 400 Area potable water system and other ingredients to mimic the physical properties of the different K Basin sludge types. When a test is complete this slurry mixture may be kept for reuse of disposed as a solid waste and/or an effluent stream to a permitted surface or ground disposal site following applicable treatment and monitoring.

Proposed activities at MASF include modifications of below-grade cells to provide a scaled mock-up of the 105-K West Basin. Concrete cutting/pouring would establish necessary configuration of the mock-up. Temporary construction fencing & gates in MASF would be installed; work platform grating(s) would be installed. Utility tie-ins would be established from existing supplies. A skid-mounted (commercially-available) water filtration unit would be installed to control the quality of the pool cell water.

Unneeded equipment/hardware would be removed and excessed/recycled. Demolition waste would be transported to and disposed in appropriate existing Hanford Site facilities. The proposed action would not interfere with continued normal facility maintenance activities at MASF.

Construction activities are scheduled to start in FY 2010. Total project costs are estimated to be no greater than \$3,000,000.

#### Categorical Exclusion (CX) to be Applied

The following CX are listed in Title 10, Code of Federal Regulations (CFR) 1021, "National Environmental Policy Act Implementing Procedures," Subpart D, Appendix B, published in the Tuesday, July 9, 1996, 61 Federal Register 36222:

B3.6 Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

#### **ELIGIBILITY CRITERIA**

Since there are no extraordinary circumstances that may affect the significance of the environmental effects of the proposal, the proposed activity meets the eligibility criteria of 10 CFR 1021.410(b), as shown in the following table. The proposed activity is not "connected" to other actions with potentially significant impacts [40 CFR 1508.25(a)(1)], or with cumulatively significant impacts [40 CFR 1508.25(a)(2)], and is not precluded by 10 CFR 1021.211.

The "Integral Elements" of 10 CFR 1021 are satisfied as discussed below.

INTEGRAL ELEMENTS 10 CFR 1021, SUBPART D, APPENDIX 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 would be violated by the proposed actions.		
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.	Wastes generated during the proposed action would not require expansion/modification of existing waste management 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. There would be no uncontrolled or unpermitted releases.		
Adversely affect environmentally sensitive resources including, but not limited to:	None of the environmentally sensitive resources listed (i through vii) will be adversely affected.		
<ul> <li>(i) Property (e.g., sites, buildings, structures, objects) of historic, archeological, 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</li> </ul>			
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 solesource aquifers, wellhead protection areas, and other water sources that are vital in a region)  (vii) Tundra, coral reefs, or rainforests?			

#### CULTURAL AND BIOLOGICAL RESOURCES REVIEWS

#### CULTURAL REVIEW DISCUSSION

No biological resource review specifically for the project has been or will be conducted; the activities will be conducted within an existing structure in an industrialized area (i.e., MASF which is inside the 400 Area fence).

MASF (437 Building) in the 400 Area is identified in Table A.6 ('Contributing Properties with No Individual Documentation Requirement') of the *Hanford Site Manhattan Project and Cold War Era Historic District Treatment Plan* (DOE/RL-97-56, Revision 1). As such, no cultural or historical impacts are anticipated as a result of the proposed action.

**Compliance Action:** I have determined that the proposed action meets the requirements for the referenced CXs. Therefore, using the authority delegated to me by DOE Order 451.1B, Change 1, I have determined that the proposed activities may be categorically excluded from further NEPA review and documentation.

Signature/Date:

R. W. Russell

Hanford NEPA Compliance Officer

bcc:

M. T. Jansky, CHPRC

M. J. Schliebe, CHPRC

Administrative Record Environmental Portal A. L. Rodriguez, RL R. S. Weeks, PNNL

# 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?		х
2.	Release other than nominal and temporary particulates or drops to the atmosphere?		х
3.	Result in more than minor thermal discharges?		х
4.	Increase offsite radiation dose to >0.1 mrem (40 CFR 61 Subpart H)?		х

### 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?		Х
8.	Provide Interconnection between aquifers?		х
9.	Require installation of wells?		х
10.	Require a Spill Prevention Countermeasure and Control Plan (40 CFR 112 and 761).		х
11.	Violate water quality standards (WAC 713-200, Table 1)		х

# IMPACT TO LAND

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

## **GENERAL**

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

Items marked "yes" in the Environmental Impact Checklist located above, are addressed in the following paragraphs:

20. Utility tie-ins from existing systems would be installed.

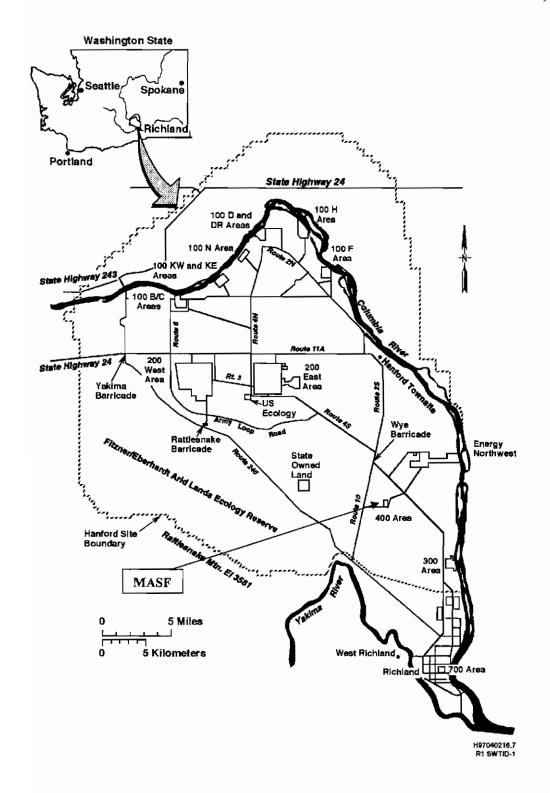


Figure 1. Hanford Site.