

See Mr. to Linton  
Am. Anttonen 9/11/87  
101.2

**BASALT WASTE ISOLATION PROJECT  
ENVIRONMENTAL REVIEW**

**BER87-001**

**Core Storage Building Site Near  
the 200-East Area**

**July 1987**

**Prepared for  
the U.S. Department of Energy  
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BER87-001  
BWIP ENVIRONMENTAL REVIEW

Core Storage Building Site near 200-East Area  
T12N, R26E, Sec.3, Benton County, Washington

INTRODUCTION:

This report details the results, conclusions, and recommendations of a Basalt Waste Isolation Project (BWIP) Environmental Review (BER) on a site scheduled for site characterization activity.

PURPOSE:

The purpose of this site is to provide a gravel pad, parking area, and storage building for geologic core samples.

NEED:

A permanent storage facility is needed for the BWIP. This facility will house rock core, rock samples, and pertinent records related to these cores. The storage vault in the building must meet NQA-1 requirements. Currently, 1115 m<sup>2</sup> (12,000 ft<sup>2</sup>) of geologic core is being stored in another building. Several potential sites were examined, and this site was selected because it best satisfied the selection criteria. The selection criteria were: accessibility of future users, safety, environmental impact, cost of construction, interference with existing or planned facilities, accessibility for visitors, building security, and transportation.

ACTION:

Approximately 1 hectare (2.3 acres) of sagebrush/cheatgrass habitat will be graded flat and covered with gravel and a cement pad. Water lines, electrical lines, and a septic system will be installed. A 1672 m<sup>2</sup> (18,000 ft<sup>2</sup>) building will be constructed on the gravel pad.

PRESENT USE:

Approximately one-half of the northern portion of the proposed site is occupied with an existing gravel parking lot. The remainder of the site is a relatively undisturbed wildlife habitat of sagebrush/cheatgrass.

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SUMMARY OF RECOMMENDATIONS

ADDITIONAL INFORMATION REQUIRED:

1. None.

RECOMMENDATIONS:

1. Remove, store, and protect the upper 15 cm (6 in.) of topsoil from the proposed site.
2. Prohibit vehicular traffic in undisturbed vegetation outside of the proposed site boundaries.
3. Stop work and contact PNL's archaeologist (J. C. Chatters, 375-6873) at once if bones or artifacts are uncovered during excavation.
4. Water the site during construction to minimize release of particulates.
5. Proceed as planned for the work planned for this site.

BER87-001  
BER ECOLOGICAL EVALUATION FORM  
FIELD CHECKLIST

This checklist must accompany each BER Team during each site visit. The Task Leader or the Lead Scientist must ensure that the checklist is completely filled out. The information in the checklist will assist in writing the site visit report. Please indicate in the yes column if activities are results of construction (C) and/or operation (O).

1. SITE IDENTIFICATION:

- a. Range, township, section (e.g., R25E, T12N, S10):  
R26E, T12N, Sec. 3
- b. When did BER site visit occur?  
 Date: March 31, 1987
- c. Specific vegetative type (e.g., sagebrush, cheatgrass):  
Sagebrush/Cheatgrass
- d. Terrain and soil (e.g., flat, sandy/silt):  
Flat/sandy
- e. Location of nearest human activity:  
200-West Area fence is 91 m (100 yards) east.
- f. When will site preparation begin?  
1987
- g. When will site operation end?  
1987

2. STATUS OF PROJECT:

YES    NO

- a. Study Plan/Project Description available?                    X
- b. Map available with scale and dimensions?                    X
- c. Photographs available?                                            X
- d. Site activity partially completed?                                X          
 Specify percentage of site activity completed:  
One-half of site is a gravel pad.
- f. Has site been staked?                                                X

3. AFFECTED ENVIRONMENT:

- a. Evidence of past disturbance?                                        X          
 (If yes, describe):  
Approximately one-half of the northern half of the proposed site is occupied by an existing gravel pad and an office trailer. The existing pad is used for parking. The existing pad is approximately 61 x 85 m (200 x 280 ft).



YES NO

6. LAND FACILITIES USE:

Will the proposed activity:

- a. conflict with any existing land use? C&O       
The proposed activity will conflict with existing land use, which is a wildlife habitat. The loss of a small amount of habitat will not have significant impacts.
- b. be located on a 100- or 500-year floodplain?      X
- c. be located on wetlands?      X
- d. generate a volume of solid waste for disposal:  
 1) hazardous, radioactive?      X  
 2) other? (specify):
- e. result in a potential for erosion?      X
- f. necessitate excavation? C       
Some excavating will be necessary to install a short section of water line 67 m (220 ft) long, sewer line 18 m (60 ft) long, septic system 1.5 to 15 m (5 to 50 ft) and sections of drain field. The excavations will be small, of short duration, and will be filled following pipe placement. The water line excavations and a portion of the sewer line will be covered with gravel. The disturbance caused by the sewer line configuration should be watered to reduce release of particulates. The watering will encourage growth of naturally occurring seed.
- g. possibly impact land? Mitigation? X       
 (If yes, specify mitigation):  
The land will be impacted, being converted from wildlife habitat to industrial use. The loss of this small acreage is not significant but cumulative impacts may become significant.  
  
The loss of wildlife habitat can be mitigated by reclaiming the site after abandonment and/or reclaiming other disturbed habitat elsewhere on the Hanford Site. This will likely become a permanent site; therefore, we recommend that comparable acreage be reclaimed to sagebrush/cheatgrass habitat.
- h. require new utilities or modification to existing utilities? C&O       
A short section of powerline will be built to supply electricity to the site. A short water line will be placed, running from the existing hydrant near the trailer on the existing gravel.

	YES	NO
<b>7. NOISE:</b>		
Will the proposed activity:		
a. increase noise levels? <u>Noise levels will increased during construction and during operation.</u>	<u>C&amp;O</u>	_____
b. cause any noise impacts? (If yes, specify mitigation): <u>The additional noise and human activity could negatively impact wildlife in the immediate area. The impact of these factors is unknown but will probably be minor because of the small size of the site and proximity to existing developments. We do not see a need to mitigate noise impacts at this location.</u>	<u>X</u>	_____
<b>8. CHEMICAL/RADIOLOGICAL:</b>		
Will the proposed activity:		
a. require use of carcinogens, pesticides, or toxic substances?	_____	<u>X</u>
b. increase offsite radiation dose?	_____	<u>X</u>
<b>9. CULTURAL RESOURCES:</b>		
a. Has the site been surveyed for cultural resources? <u>This site received a cultural resources survey. See the "Cultural Resources Review Form." page 10.</u>	<u>X</u>	_____
b. Is there evidence of cultural, archaeological, paleontological, or religious sites?	_____	<u>X</u>
c. Does the site require further investigation?	_____	<u>X</u>
d. Was the site cleared for previous activities? (If so, when?) <u>March 31, 1987</u>	<u>X</u>	_____
This site was cleared (approved) for construction.		
e. Was a determination made that this site cannot be disturbed? (If so, when?) _____	_____	<u>X</u>
<b>10. BIOLOGICAL RESOURCES:</b>		
a. Does the site contain the type habitat for threatened (T) and endangered (E) plants?	_____	<u>X</u>
b. Are T and E plant species present? (If yes, which species?) _____	_____	<u>X</u>

YES NO

- c. Does the site contain habitat that could support T, E, or candidate (C) animal species?  
(If yes, which species?) X       
The habitat present at this site could potentially support pygmy rabbit.
- d. Is an onsite survey of T, E, and S species necessary? X       
The site was surveyed for the presence of these species but neither the species nor its sign was evident.
- e. Are T, E, or candidate (C) animal species present? (If yes which species?)      X
- f. Will impacts occur to any of these species or their habitats? X       
If pygmy rabbits utilize this site, loss of the 2.3 acres of habitat might have minor impacts on this species.
- g. Can impacts be mitigated? X       
Impacts, if they occur, could be mitigated by reclamation of comparable acreage elsewhere. We recommend that PNL and Rockwell work together to develop a reclamation plan to mitigate the loss of this habitat.

11. REGULATORY REVIEW:

- a. Has a regulatory review been completed on this site? X       
See the "Regulatory Review" on page 8 of this report.

(Signed): Robert L. Nance (Title): Task Leader (Date): 7/16/87

BER87-001  
BER REGULATORY REVIEW FORM

Subject: Core Storage Facility  
Date of Report: May 8, 1987  
Site Visit or Documentation Review?: Site Visit  
Date of Site Visit/Doc. Review: March 31, 1987  
Location: 200-East Area

Regulatory Compliance Checklist: See the "Checklist," page 9.

Considerations and Concerns: None.

Conclusions: Based on the information provided for this activity, no concerns of statutory or regulatory importance have been identified.

Signed:

Sus E King

Susan E. King  
Scientist

7/17/87

Date

BER87-001  
REGULATORY COMPLIANCE CHECKLIST

The following is a list of federal and state statutes and executive orders identified as being applicable or potentially applicable to any or all site characterization activities. The middle and right hand columns indicate the degree of applicability of each statute/executive order to the site characterization activity that is the subject of the BER.

SUBJECT: Core Storage Facility

<u>ACTS/EOs</u>	<u>MAY APPLY(a)</u>	<u>TRIGGERED(b)</u>
Clean Air	(None Apply)	(None Apply)
Noise Control		
National Historic Preservation		
American Indian Religious Freedom		
Archaeological Resources Protection		
Endangered Species		
Bald and Golden Eagle Protection		
Migratory Bird Treaty		
Federal Water Pollution Control		
Safe Drinking Water		
Floodplain/Wetlands		
RCRA		
CERCLA		
Toxic Substances Control		
Washington Clean Air		
General Regulation 80-7 (County Air)		
Washington Noise Control		
Washington Clean Water		
Washington Safe Drinking Water		
Washington Hazardous Waste		
Washington Solid Waste		
Other		
Other		

- (a) The applicability of the statute/executive order to this site characterization activity was examined in detail before it was determined that no action was required for compliance.
- (b) Requirements of the statute/executive order are triggered by this site characterization activity and are discussed in the text preceding this checklist.

BER87-001  
BER CULTURAL RESOURCES REVIEW FORM

Subject: Core Storage Facility

Date of Report: May 27, 1987

Location: 200-East Area

Cultural Resources Personnel: J. C. Chatters, Archaeology; S. E. King, Regulatory.

Date of Literature Review: March 20, 1987

List of Literature Reviewed: The National Register of Historic Places: Rice 1980; 1984a,b; Relander 1956; Schuster 1975.

Date of Site Visit: March 20, 1987 and March 31, 1987

Survey Techniques Employed: See "BWIP Procedures for Cultural Resource Reviews" in BER87-001 (page 12).

Cultural Resources Observed: None.

Cultural Resource Potentials: While the archaeological survey revealed no trace of cultural resources, and the area is not known to be important to Indian peoples as a food gathering or religious site, removal of over 15 cm (6 in.) of soil could conceivably disturb subsurface cultural resources. However, this disturbance is unlikely.

Conclusions and Recommendations: Construction of the core storage facility will have no impact on any known or suspected cultural properties. If any cultural resources, particularly human burials, are uncovered during site preparation, all surface-disturbing activities must cease immediately and the PNL archaeologist (J. C. Chatters, 375-6873) must be called to assess the significance of the find. The contractors should assume that any bones found are human until the archaeologist has stated otherwise.

Prepared By: Robert L. Newell for J.C. Chatters Date 7/16/87

James C. Chatters, Ph.D.  
Senior Research Scientist

Literature Cited:

- Relander, C. 1956. Drummers and Dreamers. Caxton Printers, Caldwell, Idaho.
- Rice, D. G. 1980. "Overview of Cultural Resources on the Hanford Reservation in South-Central Washington State." Report to the U.S. Department of Energy, Richland Operations Office, Richland, Washington.
- Rice, D. G. 1984a. "Archaeological Inventory of the Basalt Waste Isolation Project, Hanford Reservation, Washington." Letter Report, to Rockwell Hanford Operations, SD-BWI-TA-007, Richland, Washington.
- Rice, D. G. 1984b. "Archaeological Survey of the Basalt Waste Isolation Project Reference Repository Location and Associated Drill Borehole Site Locations." Letter Report to Rockwell Hanford Operations, SD-BWI-TA-007, Richland, Washington.
- Schuster, H. H. 1975. Yakima Indian Traditionalism. Dissertation, University Microfilms, Ann Arbor, Michigan.