RL-F-1325.6 (02/98)

United States Government **Department of Energy**

memorandum

Richland Operations Office

DATE: March 7, 2003

REPLY TO ATTN OF: RCA:PFXD/03-RCA-0167

SUBJECT: ENVIRONMENTAL ASSESSMENT FOR REACTIVATION AND USE OF THREE FORMER BORROW SITES IN THE 100-F, 100-H AND 100-N AREAS, HANFORD SITE, RICHLAND WASHINGTON. DOE/EA-1454

TO: Keith A. Klein
Manager

The Environmental Restoration Division (ERD) has prepared the subject Environmental Assessment (EA) to analyze whether the potential environmental impacts of proposed action are significant and would require preparation of an Environmental Impact Statement (EIS). The proposed action is to obtain borrow materials from formerly used borrow pits in the 100 areas of the Hanford Site.

An RL NEPA Review Panel reviewed the draft EA to assess conformance with NEPA requirements and to recommend an appropriate resolution of the EA. The Panel was chaired by the Hanford NEPA Compliance Officer, and included representatives of ERD, the Regulatory Compliance and Analysis Division, the Closure Division, the Project Management Support Organization, the Office of Chief Council and the Pacific Northwest National Laboratory. Based on the impacts discussed in the draft EA and considering comments received from the Nez Perce Tribe, the Yakama Nation, the U. S. Fish and Wildlife Service, the Washington State Department of Fish and Wildlife, and the Washington State Department of Ecology, the panel concluded that the potential environmental impacts of these actions are not significant in the NEPA sense. Therefore, the Panel recommends that the EA be resolved by a Finding of No Significant Impact (FONSI).

Attached for your approval are the final EA and FONSI. Authority to approve EAs and FONSIs is assigned to you by DOE Order 451.1B.

Following your approval, the EA and FONSI will be published and issued as required by the Council on Environmental Quality and DOE regulations. Copies of the approved EA and FONSI will be placed in the DOE Hanford and Headquarters reading rooms, and on the Hanford Home Page, http:/www.hanford.gov/#eis and submitted for placement on the DOE-HQ NEPA Website. A notice of availability will be placed in the local newspaper.

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

Attachment

FINDING OF NO SIGNIFICANT IMPACT

REACTIVATION AND USE OF THREE FORMER BORROW SITES IN THE 100-F, 100-H, AND 100-N AREAS

MARCH 2003

AGENCY: U.S. Department of Energy

ACTION: Finding of No Significant Impact

SUMMARY: The U.S. Department of Energy (DOE) has prepared an Environmental Assessment (EA), DOE/EA-1454, to assess environmental impacts associated with the reactivation and use of three former borrow sites in the 100-F, 100-H, and 100-N Areas of the Hanford Site, Richland, Washington. Based on the analysis in the EA, and considering tribal and agency comments, DOE has determined that the proposed action is not a major federal action significantly affecting the quality of the human environment within the meaning of the *National Environmental Policy Act of 1969* (NEPA), 42 U.S.C. 4321, et seq. Therefore, the preparation of an Environmental Impact Statement (EIS) is not required.

ADDRESSES AND FURTHER INFORMATION: Single copies of the EA and further information about the proposed action are available from:

U.S. Department of Energy
Richland Operations Office
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Environmental Restoration Division
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For further information regarding the DOE NEPA process, contact:

Ms. Carol M. Borgstrom, Director
Office of NEPA Oversight
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PURPOSE AND NEED: The U.S. Department of Energy needs to obtain raw aggregate material (approximately 1,104,000 bank cubic meters [bcm]) to be used as backfill for restoration projects in the 100-F, 100-H, 100-N, and 100-K Areas of the Hanford Site near Richland, Washington.

BACKGROUND: Historically, mineral resources extracted on the Hanford Site have been used (1) to make concrete and construct roads, (2) as cap material for interim stabilization and backfill for closing waste sites, and (3) for general construction.

Mitigation activities for potential habitat loss from borrow site excavation and construction of haul roads would be performed as necessary. Topsoil from the expansion areas of the borrow sites and surface materials from construction of roads would be stockpiled for future use in restoration when closing the sites. Mitigation actions performed, including revegetation of borrow sites and haul roads, would be consistent with resource management plans that have been developed for the Hanford Site, including the following:

- *Bald Eagle Site Management Plan for the Hanford Site, South-Central Washington*
- *Hanford Site Biological Resources Mitigation Strategy*
- *Draft Industrial Mineral Resources Management Plan*
- *Threatened and Endangered Species Management Plan: Salmon and Steelhead*
- *Mitigation Action Plan for the 100 and 600 Areas of the Hanford Site*
- *Hanford Site Biological Resources Management Plan* (BRMaP)
- *Draft Hanford Cultural Resources Management Plan*
- Other plans under preparation (e.g., *Draft Aesthetic and Visual Resources Management Plan*).

ALTERNATIVES CONSIDERED: The EA discussed a variety of alternatives as well as the No-Action Alternative.

No-Action Alternative. Under the No-Action Alternative, excavation of borrow materials would continue from existing borrow sites for site maintenance activities and remediation under *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA) records of decision.

Alternatives. Alternatives addressed in the EA included: utilizing existing borrow pits 19 and 20 that have temporal restrictions (because of potential impacts to eagles), use of other onsite borrow pits from the 200 Areas, and supplementing existing onsite sources by procurement of offsite materials.

ENVIRONMENTAL IMPACTS: Activities associated with excavation and transportation of borrow materials would not result in any significant environmental impacts.

Routine Operations No radiological or toxicological exposure to personnel or the general public is expected to occur as a result of routine excavation operations, either loading or offloading activities. No unique hazards that would result in increased risk to the worker or public during onsite transportation of borrow materials were identified. No significant impacts to air quality, water quality, land use, ecological or cultural and aesthetic and

Associated land-use commitments in general, and borrow sites specifically, have been and continue to be addressed when considering activities on the Hanford Site.

Land use on the Hanford Site has been addressed in DOE/EIS-0222-F, *Final Hanford Comprehensive Land-Use Plan Environmental Impact Statement.* The *Draft Industrial Mineral Resources Management Plan* was written to provide a framework for the planning, operations, and closure/restoration of borrow pits and quarries and was developed as part of a series of resource management plans needed to implement the EIS. Appendix D of the EIS and the *Draft Industrial Mineral Resources Management Plan* identify preferred sources of borrow material on the Hanford Site.

Several borrow areas were evaluated for continued use in the DOE/EA-1403 *Environmental Assessment for Use of Existing Borrow Areas, Hanford Site, Richland, Washington*. Borrow sources that were intended to support remedial action backfill requirements in the 100-F, 100-H, 100-N, and 100-K Areas present certain challenges, such as limited fill material availability or limited expansion capability, locations that are substantial distances from the remedial action sites, locations that are near sensitive species, or fiscal considerations that cause them to be less preferable sources of fill material. For these reasons, the reopening of former borrow sites located in the 100-F, 100-H, and 100-N Areas was evaluated as a Proposed Action to meet backfill requirements.

PROPOSED ACTION: The DOE proposes to obtain borrow materials from formerly used borrow pits in the 100-F, 100-H, and 100-N Areas on the Hanford Site. The total volume of materials to be recovered over the duration of remedial actions in the 100-F, 100-H, 100-K, and 100-N Areas is estimated to be approximately 1,104,000 cubic meters (1,446,240 cubic yards). The Proposed Action would take place over a period of approximately 10 years, in accordance with commitments to clean up the 259 km^2 (100 mi^2) associated with the Columbia River Corridor before calendar year 2012. Additional impacts would be evaluated should excavations exceed greater than 10% of the footprint area estimated in this EA.

Conventional industrial equipment would be used to excavate and transport the borrow material. For example, scrapers, power shovels, or front-end loaders could be used to excavate materials. The Proposed Action would also include ensuring adequate access is provided to the borrow locations. Existing haul roads would require upgrades, and new roads may be constructed within the boundaries of the remedial action sites for the transportation of borrow material.

Ecological and cultural resource reviews have been performed for the proposed borrow areas. Such reviews would also be performed annually to renew Hanford Site excavation permits and to identify potential additional impacts should the status of any of the borrow areas change during that time include the construction or upgrade of haul roads as needed.

visual resources would occur. Impacts to sensitive habitats would be mitigated consistent with the *Hanford Site Biological Resources Management Plan* and the *Hanford Site Biological Resources Mitigation Strategy*. Borrow sites and adjacent areas as appropriate, would be restored with native plant species resulting in greater habitat value than currently exists.

Accident Scenarios Accident consequences have been considered for the proposed action. Postulated accidents associated with the excavation of borrow materials on the Hanford Site have been considered, and are believed to be bounded by those potential events associated with construction and transportation accidents. It is expected that operation of the proposed borrow sites would not contribute disproportionate risks to ongoing intra-site transport.

Socioeconomic Impacts The proposed action would use existing personnel at the Hanford Site; therefore, the proposed action would have no socioeconomic impacts.

Environmental Justice 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, high and disproportionate 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. The analysis of the impacts in this EA indicates that there would be minimal health or socioeconomic impacts to both the offsite population and workforce by implementing the Proposed Action. Therefore, it is not expected that there would be any high and disproportionate adverse impacts to any minority or low-income portion of the community.

Cumulative Impacts Cumulative environmental impacts were considered but no significant cumulative impacts are expected from implementation of the proposed action.

No cumulative impacts to natural resources would be expected from the activation or operation of the borrow sites in concurrence with remedial action activities in the 100 Areas. Impacts to ecological resources would be expected to be minor because habitat value is low at all Proposed Action locations. Restoration actions taken to reestablish native species and the shrub community after operation of the borrow sites and haul roads is complete will increase habitat value beyond that of pre-excavation conditions.

DETERMINATION: Based on the analysis in this EA, and after considering the pre-approval comments received from the Nez Perce Tribe, the Yakama Nation, U.S. Fish and Wildlife Service, and the State of Washington Departments of Ecology, and Fish and Wildlife, I conclude that the proposed action for reactivation and use of three former borrow sites in the 100-F, 100-H, and 100-N Areas of the Hanford Site does not constitute a major federal action significantly affecting the quality of the human environment within the meaning of NEPA. Therefore, an EIS is not required.

Issued at Richland, Washington, this 7th day of March, 2003.

Keith A. Klein
Manager
Richland Operations Office