



Department of Energy

Idaho Operations Office
1955 Fremont Avenue
Idaho Falls, ID 83415

February 18, 2009

SUBJECT: Finding of No Significant Impact for the Final Environmental Assessment for the Remote-handled Waste Disposition Project (WDP-RWMC-09-008)

Dear Interested Party:

The U.S. Department of Energy, Idaho Operations Office (DOE-ID) issued a Finding of No Significant Impact (FONSI) for the Final Environmental Assessment for the Remote-handled Waste Disposition Project. The environmental assessment contains the analysis of the potential environmental impacts of processing for disposition approximately 327 cubic meters of remote-handled (RH) waste currently stored at the DOE's Idaho and Hanford Sites. DOE considered four alternatives using different locations and facilities on the Idaho Site for the waste processing activities, and two different waste transportation routes. DOE selected "Alternative 1: INTEC Existing Facilities Alternative." Existing facilities at the INL Idaho Nuclear Technology and Engineering Center (INTEC) will be used to conduct waste processing activities. U.S. Highway 20 was selected for waste transportation. Periodic road closures on Highway 20 will be scheduled and publicized in a manner that will minimize the potential for public inconvenience.

The draft environmental assessment was made available for a 40-day public review and comment period. DOE considered all comments made on the draft assessment before selecting the alternative that best meets the project's purpose and need.

The FONSI is the Department's determination that the selected alternative does not constitute a major federal action significantly affecting the quality of the human environment.

If you have any questions about this notification please contact Chuck Ljungberg, Document Manager for this project at (208) 526-0198, or Jack Depperschmidt, DOE-ID National Environmental Policy Act Compliance Officer, at (208) 526-5053.

Sincerely,

A handwritten signature in black ink, appearing to read "Dennis M. Miotla".

Dennis M. Miotla
Interim Manager

**U.S. DEPARTMENT OF ENERGY
FINDING OF NO SIGNIFICANT IMPACT
FOR THE ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED
REMOTE-HANDLED WASTE DISPOSITION PROJECT**

Agency: U.S. Department of Energy (DOE)

Action: Finding of No Significant Impact (FONSI)

Summary: DOE prepared an Environmental Assessment (EA) for the Proposed Remote-handled Waste Disposition Project. DOE has approximately 322 cubic meters (around 980 containers) of remote-handled (RH) waste stored at the Materials and Fuels Complex (MFC) and the Idaho Nuclear Technology and Engineering Center (INTEC) on the Department of Energy Idaho Site. These RH wastes require further processing before being disposed. A portion of this RH waste is RH transuranic (TRU). The DOE must take action to comply with the Idaho Settlement Agreement and Consent Order (Idaho 1995) mandating that INL TRU waste be shipped out of Idaho by a target date of December 31, 2015, and no later than December 31, 2018. In addition to the INL waste discussed above, the DOE has five cubic meters of RH low-level waste (LLW) located at the DOE Hanford Fast Flux Test Facility (FFTF), which are identified as RH-special components (RH-SCs) that need additional processing prior to disposal. The FFTF waste treatment decision and the associated transportation impacts are being analyzed in the Tank Farm Closure & Waste Management Environmental Impact Statement for the DOE Hanford Site. The impacts of processing them are included in the EA, in case DOE decides to treat those wastes as part of this project.

The proposed action consists of processing the wastes in four phases. Waste processing activities for the first three phases include retrieving and transporting the containers, opening the containers, and characterizing, sizing, and repackaging the waste according to waste classifications. Phases I, II, and III would not include any sodium-contaminated waste or waste comingled with fuel pieces, which are present in the waste inventory. This waste would be processed under Phase IV, using one of the treatment technologies presented in the EA (Section 3.1.2.3).

Four alternatives considering the use of different facilities and locations for the conduct of the proposed actions were analyzed:

- Alternative 1 - INTEC Existing Facilities Alternative (preferred alternative);
- Alternative 2 - MFC/INTEC Existing Facilities Alternative;
- Alternative 3 - INTEC Existing Facility and New Construction at MFC Alternative;
- Alternative 4 - MFC Existing Facilities and New Construction Alternative.

The No Action Alternative, which would leave the waste in the existing storage location at the MFC, was also evaluated.

Two viable “out of commerce” waste transportation route options were evaluated. These included: temporarily closing and using U.S. Highway 20; and using an existing two-track road on the INL referred to as the T-25 Powerline Road.

The draft EA was released for a 40-day public review and comment period on December 19, 2008. DOE received comments from ten members of the public or organizations. DOE responded to those comments and revised portions of the EA, as appropriate.

The EA was prepared in accordance with the Council on Environmental Quality (CEQ) Regulations for implementing the National Environmental Policy Act (NEPA) (40 CFR Parts 1500-1508), and the DOE NEPA Implementing Procedures (10 CFR Part 1021).

Selected Alternative: Alternative 1 – INTEC Existing Facilities Alternative (Preferred Alternative)

Either the hot cells located in the New Waste Calcining Facility (NWCF)(CPP-659) or the Fluorinel Dissolution Process (FDP) Cell located in the Fluorinel Dissolution Process and Fuel Storage (FAST) facility (CPP 666) would be used to perform Phases I, II, III, and IV under Alternative 1, the Preferred Alternative. Modifications to the NWCF cells to support the waste processing actions would be completed as described in Section 3.5.1.2 of the EA. Decontamination and modification would be performed as necessary for use of the FDP Cell as described in Section 3.5.1.3 of the EA to support processing the waste. Two interim storage facilities available at INTEC (CPP-2707 and CPP-749) would be used for the Preferred Alternative.

U.S. Highway 20 is selected for waste transportation. Periodic road closures on Highway 20 will be scheduled and publicized in a manner that will minimize the potential for public inconvenience.

Analysis: Based on the analyses in the EA, the selected alternative would not have, and would likely prevent, a significant effect on the human environment within the meaning of NEPA. The term "significantly" and the significance criteria are defined by the CEQ Regulations for implementing NEPA at 40 CFR Part 1508.27. The significance criteria are addressed below.

1) **Beneficial and adverse impacts** [40 CFR Section 1508.27 (b)(1)]: The analysis indicates that there will be no significant impacts from implementing the selected alternative (Section 5.0).

2) **Public health and safety** [40 CFR Section 1508.27 (b)(2)]: The analysis indicates emissions of radiological and hazardous air pollutants are small and would not significantly affect public health (Section 5.1.2). The radiological dose to the hypothetical Maximally Exposed Individual is several orders of magnitude less than the dose received from natural background radiation, and well below the applicable standard (40 CFR 61, Subpart H), which limits doses caused by atmospheric releases of radioactivity from a DOE facility to 10 mrem/year. Administrative and engineering controls on facilities used would reduce the impacts from pollutants of concern to levels

that would minimize or eliminate any quantifiable cumulative effect on air quality (Section 5.5).

3) Unique characteristics of the geographical area [40 CFR Section 1508.27 (b)(3)]:Implementing the selected alternative will not affect any unique characteristics of the area (Section 5.1.). Due to the timing of the field survey work conducted (Fall 2008), the presence or absence of sensitive plant species potentially occurring along the T-25 Powerline road corridor was not able to be determined. This route was not selected for waste transportation, therefore the project will not impact sensitive plant species.

4) Degree to which effects on the quality of the human environment are likely to become highly controversial [40 CFR Section 1508.27 (b)(4)]: The analysis in the EA indicates implementing the selected alternative will result in no significant effects on the quality of the human environment and extent of public comment indicates that the selected action is not highly controversial.

5) Uncertain or unknown risks on the human environment [40 CFR Section 1508.27 (b)(5)]: There are no uncertain or unknown risks associated with implementing the selected alternative.

6) Precedent for future actions [40 CFR Section 1508.27 (b)(6)]:
The selected alternative does not set a precedent for future actions.

7) Cumulatively significant impacts [40 CFR Section 1508.27 (b)(7)]:
There would be no significant cumulative impacts associated with implementing the selected alternative (Section 5.5).

8) Effect on cultural or historical resources [40 CFR Section 1508.27 (b)(8)]: The analysis indicates that there will not be any impacts from implementing the selected action and using U.S. Highway 20 for waste transportation. Impacts to cultural resources would have occurred only if the T-25 Powerline Road route (Section 3.1.2.2.2) was selected for waste shipments rather than U.S. Highway 20.

9) Effect on threatened or endangered species or critical habitat [40 CFR Section 1508.27 (b)(9)]: The selected alternative would not have an effect on threatened or endangered species or critical habitat (Section 5.1.3.2). No critical habitat for threatened or endangered species, as defined in the Endangered Species Act, exists on the INL site. Impacts to biological resources would have occurred only if the T-25 Powerline Road route (Section 3.1.2.2.2) was selected for waste shipments rather than U.S. Highway 20.

10) Violation of Federal, State, or Local law [40 CFR Section 1508.27 (b)(10)]:
The selected alternative would not violate any federal, state or local law (Section 6.0).

Determination: Based on the analyses presented in the attached EA, I have determined that the selected alternative does not constitute a major federal action significantly

affecting the quality of the human environment. Therefore, preparation of an environmental impact statement is not required.

Issued at Idaho Falls, Idaho on this 18th day of February, 2009.



Dennis M. Miotla
Interim Manager, Idaho Operations Office

Copies of the EA and FONSI are available from: Brad Bugger, Office of Public Affairs, Idaho Operations Office, U.S. Department of Energy, 1955 Fremont Ave., Idaho Falls, ID 83415, (208) 526-0833 or the toll free citizen inquiry line at (800) 708-2680.

For further information on the NEPA process, contact: Jack Depperschmidt, NEPA Compliance Officer, Idaho Operations Office, U.S. Department of Energy, 1955 Fremont Ave., Idaho Falls, ID 83415, (208) 526-5053.