

U.S. NUCLEAR REGULATORY COMMISSION

[Docket No. 40-8989]

**Notice of Availability of Environmental Assessment and Finding of No Significant Impact
for Exemption from Certain NRC Licensing Requirements
for Special Nuclear Material for Envirocare of Utah, Inc.**

AGENCY: Nuclear Regulatory Commission

ACTION: Notice of Availability

FOR FURTHER INFORMATION CONTACT: James Park, Environmental and Performance Assessment Directorate, Division of Waste Management and Environmental Protection, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Telephone: (301) 415-5835; Fax number: (301) 415-5397; Email: jrp@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Introduction

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an Order pursuant to Section 274f of the Atomic Energy Act that would modify an existing Order for Envirocare of Utah, Inc. (Envirocare). The existing order exempts Envirocare from certain NRC regulations and permits Envirocare, under specified conditions, to possess waste containing special nuclear material (SNM), in greater quantities than those specified in 10 CFR Part 150, at Envirocare's low-level waste (LLW) disposal facility located in Clive, Utah, without obtaining an NRC license pursuant to 10 CFR Part 70. The NRC has prepared an Environmental Assessment (EA) in support of this action in accordance with the requirements of 10 CFR Part 51. Based on the EA, the NRC has concluded that a Finding of No Significant Impact (FONSI) is appropriate. The modified Order will be issued following the publication of this Notice.

II. Environmental Assessment

Background

The NRC is considering issuance of an Order pursuant to Section 274f of the Atomic Energy Act that would modify an existing Order for Envirocare. The existing order exempts Envirocare from certain NRC regulations and permits Envirocare, under specified conditions, to possess waste containing SNM, in greater quantities than those specified in 10 CFR Part 150, at Envirocare's LLW disposal facility located in Clive, Utah, without obtaining an NRC license pursuant to 10 CFR Part 70. Published in the *Federal Register* on May 21, 1999 (64 FR 27826), the original Order was modified subsequently on January 30, 2003, at the request of Envirocare and published in the *Federal Register* on February 13, 2003 (68 FR 7399).

Envirocare is licensed by the State of Utah, an NRC Agreement State, under a 10 CFR Part 61 equivalent license for the disposal of LLW. Envirocare also is licensed by Utah to dispose of mixed waste, hazardous waste, and 11e.(2) byproduct material (as defined under Section 11e.(2) of the Atomic Energy Act of 1954, as amended).

By letter dated July 8, 2003, Envirocare proposed that the NRC amend the January 30, 2003 Order. The NRC staff has evaluated this request in two phases. In the first phase, the NRC staff evaluated the following requested revisions: (1) modify the table in Condition 1 to include limits for uranium and plutonium in waste without magnesium oxide; (2) modify the units of the table from picocuries of SNM per gram of waste material to gram of SNM per gram of waste material; and (3) revise the language of Condition 5 to be consistent with the revised units in the table in Condition 1. The NRC staff approved these revisions and published a modified Order in the *Federal Register* on December 29, 2003 (68 FR 74986). In the second phase, which is the subject of this EA, the NRC staff has evaluated the remaining revisions requested by Envirocare (the proposed action).

Review Scope

The purpose of this EA is to assess the environmental impacts of Envirocare's requested modification to its December 2003 Order. This EA does not approve or deny the requested action. A separate Safety Evaluation Report (SER) also will be issued in support of the approval or denial of the requested action. This EA will determine whether to issue or prepare an Environmental Impact Statement (EIS). Should the NRC issue a FONSI, no EIS will be prepared.

Proposed Action

Envirocare proposes that the NRC amend the December 29, 2003 Order to: (1) modify the table in Condition 1 to include criticality-based limits for uranium-233 and plutonium isotopes in waste containing up to 20 percent of materials listed in Condition 2 (e.g., magnesium oxide); (2) include criticality-based limits in the table in Condition 1 for plutonium isotopes in waste with unlimited materials in Condition 2, and in waste with unlimited quantities of materials in Conditions 2 and 3 (e.g., beryllium); (3) provide criticality-based limits for uranium-235 as a function of enrichment in waste containing up to 20 percent of materials listed in Condition 2 and in waste containing none of the materials listed in Condition 2; and (4) include additional mixed waste treatment technologies.

Need for the Proposed Action

In its July 8, 2003 request, Envirocare states that it is currently at a competitive disadvantage with another waste disposal company. Envirocare would like to expand its capabilities to accept additional waste streams and treat waste using additional technologies. In order to do so, Conditions 1 and 5 of the Order would need to be revised.

Alternatives to the Proposed Action

The only alternative to the proposed action that the NRC staff considered was the no-action alternative. Under the no-action alternative, the Order would not be revised.

Affected Environment

The NRC staff has prepared an environmental impact statement (EIS) (NUREG-1476; August 1993), EAs, and SERs for its previous actions. The affected environment for the Envirocare site is described in detail in NUREG-1476.

Environmental Impacts of the Alternatives

No-Action Alternative: For the no-action alternative, the environmental impacts would be the same as those evaluated in the EAs that support the May 21, 1999 Order (64 FR 26463, May 14, 1999), the January 30, 2003 modification of the Order (68 FR 3281, January 23, 2003), and the December 29, 2003 modification of the Order (68 FR 59645, October 16, 2003). The regulations regarding SNM possession in 10 CFR Part 150 set mass limits whereby a licensee is exempted from the licensing requirements of 10 CFR Part 70 and can be regulated by an Agreement State. The licensing requirements in 10 CFR Part 70 apply to persons possessing

greater than critical mass quantities (as defined in 10 CFR 150.11). The principal emphasis of 10 CFR Part 70 is criticality safety and safeguarding SNM against diversion or sabotage. The NRC staff considers that criticality safety can be maintained by relying on concentration limits, under the specified conditions. These concentration limits are considered an alternative definition of quantities not sufficient to form a critical mass to the weight limits in 10 CFR 150.11, thereby assuring the same level of protection. The 1999 and the two 2003 EAs concluded that issuance of the Order would have no significant radiological or non-radiological environmental impacts.

Proposed Action: For the proposed action, the environmental impacts are not expected to be significant. Effluent releases and potential doses to the public are regulated by the State of Utah and are not anticipated to change as a result of this revision. The NRC staff previously determined in the 1999 EA that there would be no significant radiological or non-radiological impacts resulting from the proposed limits of uranium and plutonium. In addition, these revisions to the Order are not expected to significantly change environmental impacts from current operations at Envirocare.

For Envirocare, the changes to the limits will allow the site to accept new waste streams, which may increase the number of waste shipments to the site. It is estimated that this may result in approximately 100 additional shipments per year to the site, which equates to about two shipments per week. It is not expected that the small increase in shipments would have a significant environmental impact to the local area.

In addition, it is not expected that Envirocare's use of the new waste processing technologies would have significant environmental impacts. These technologies would be used in treating and stabilizing waste containing SNM, and any effluents from these processes would be collected and managed to prevent release. As stated previously, potential radiological doses are not anticipated to change as a result of the use of these new technologies.

Conclusion

Based on its review, the NRC staff finds that the environmental impacts from the proposed action and the no-action alternative are similar. Since the proposed action will not significantly impact the quality of the human environment, the NRC staff concludes that the proposed action is the preferred alternative.

Agencies and Persons Consulted

Officials from the State of Utah, Department of Environmental Quality, Division of Radiation Control were contacted about this EA for the proposed action and had no comments. Because the proposed action is not expected to have any impact on threatened or endangered species or historic resources, the U.S. Fish and Wildlife Service and the State of Utah Historic Preservation Officer were not contacted.

III. Finding of No Significant Impact

On the basis of the EA, The NRC has concluded that there are no significant environmental impacts from the proposed amendment and has determined not to prepare an environmental impact statement.

IV. Further Information

Documents related to this action, including the application for amendment and supporting documentation, will be available electronically at the NRC's Electronic Reading Room at <<http://www.NRC.gov/reading-rm/adams.html>>. From this site, you can access the NRC's Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. The ADAMS accession numbers for the documents related to this notice are: Envirocare's June 8, 2003 request (ADAMS Accession No. ML031950334) and the NRC staff's June 2005 SER (ADAMS Accession No. ML041190003). If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC's Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737, or by email to pdr@nrc.gov.

These documents may also be viewed electronically on the public computers located at the NRC's PDR, O 1 F21, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852. The PDR reproduction contractor will copy documents for a fee.

Dated at Rockville, Maryland this 11th day of July 2005.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

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