

Section 274f of the Atomic Energy Act that would modify an Order transmitted to Envirocare of Utah, Inc. (Envirocare). The original Order was published in the **Federal Register** on May 21, 1999 (64 FR 27826). The 1999 Order exempted Envirocare from certain NRC regulations and permitted Envirocare, under specified conditions, to possess waste containing special nuclear material (SNM), in greater quantities than 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. At the request of Envirocare, the Order was subsequently modified on January 30, 2003, 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 is also licensed by Utah to dispose of mixed-radioactive and hazardous waste. In addition, Envirocare has an NRC license (SMC-1559) to dispose of waste containing 11(e)2 byproduct material.

In a letter dated July 8, 2003, Envirocare requested that the January 2003 Order be amended as discussed below. Staff's safety analysis for the revisions to the January 2003 Order is discussed in the companion Safety Evaluation Report (SER).

II Environmental Assessment (EA)

Identification of Proposed Action

Envirocare proposes that NRC amend the January 2003 Order to: (1) Modify the table in Condition 1 to a criticality basis for uranium-233 and plutonium isotopes, and revise the concentration limits for uranium and plutonium to include limits for waste without magnesium oxide; (2) modify the units of the table from pCi 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.

Need for the Proposed Action

The table in Condition 1 of the January 2003 Order prescribes concentration limits that are based on Class A low-level radioactive waste limits rather than a criticality-based analysis. Envirocare would like to expand its capabilities to accept additional waste streams. In order to do so, the SNM concentration limits in the table in Condition 1 of the Order would need to be revised.

Alternatives to the Proposed Action

The NRC staff considered the proposed action and the no-action alternative. The no-action alternative would be not to revise the Order.

Affected Environment

NRC has prepared an environmental impact statement (EIS) (NUREG-1476), SERs, and EAs 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 evaluated in the Environmental Assessments to support the 1999 Order (64 FR 26463, May 14, 1999) and the January 2003 modification of the Order (68 FR 3281). 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 principle 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 January 2003 EAs concluded that the Order would have no significant radiological or nonradiological 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. In a 2001 EA for Waste Control Specialists, LLC (WCS) (66 FR 56358), the staff found that there would be no significant radiological or nonradiological impacts resulting from the proposed limits of uranium and plutonium, and the same limits are being applied to Envirocare in this revision of its Order. In addition, these revisions to the Order are not expected to significantly change environmental impacts from current operations at Envirocare. WCS does not use magnesium oxide in its processing;

therefore, in order to use the same limits for uranium and plutonium at its facility, Envirocare will not use magnesium oxide during treatment of the waste stream allowed by the revision. This will help ensure criticality safety during processing.

For Envirocare, the changes to the limits will allow the site to accept a new waste stream, which may increase the number of waste shipments to the site. The addition of a new waste stream would result in approximately 40 additional shipments per year to the site, which equates to less than one shipment per week. It is not expected that the small increase in shipments would have a significant environmental impact to the local area.

Preferred Alternative

The staff has concluded that the proposed action is the preferred alternative. The radiological and nonradiological impacts are not expected to be significant.

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 Fish and Wildlife Service and the State of Utah Historic Preservation Officer were not contacted.

III. Finding of No Significant Impact

The environmental impacts of the proposed action have been reviewed in accordance with the requirements set forth in 10 CFR part 51. Based upon the forgoing EA, the NRC finds that the preferred alternative of the proposed action will not significantly impact the quality of the human environment. Accordingly, the NRC has decided not to prepare an EIS for the proposed exemption.

IV. Further Information

The request for modifying the Order is available for inspection at NRC's Public Electronic Reading Room at <http://www.nrc.gov/NRC/ADAMS/index.html> ML031950334. The September 23, 2003, Safety Evaluation Report is available at ML032680942. The EA for the January 2003 Order is available in the **Federal Register** at 68 FR 3281. The EA for the exemption for WCS is available in the **Federal Register** at 66 FR 56358. Documents may also be obtained from NRC's Public Document Room at U.S. Nuclear Regulatory Commission, Public Document Room,