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BEFORE THE UNITED STATES NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF)	
INTERNATIONAL URANIUM (USA))	DOCKET NO.
CORPORATION'S AMENDMENT TO)	
NRC SOURCE MATERIAL LICENSE)	REQUEST FOR HEARING OF
SUA-1358)	ENVIROCARE OF UTAH, INC.
_____)	

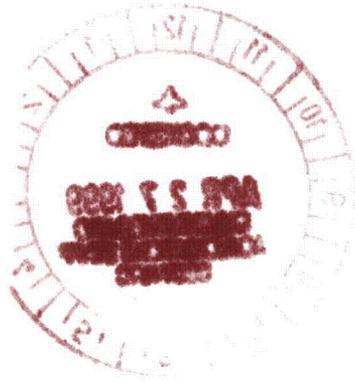
I. INTRODUCTION

1.1 This is a request by Envirocare of Utah, Inc. ("Envirocare") to the United States Nuclear Regulatory Commission ("NRC") pursuant to 10 C.F.R. § 2.1205, for a hearing on International Uranium (USA) Corporation's ("IUSA") application to amend its Source Material License SUA-1358 to allow for the receipt and "processing" of uranium-bearing material to be removed by a U.S. Army Corp of Engineers contractor from a site being managed under the Formerly Utilized Sites Remedial Action Program ("FUSRAP") near St. Louis, Missouri ("the St. Louis material").

1.2 In filing this request, Envirocare recognizes the NRC's recent decisions in *Quivira Mining Company* (Ambrosia Lake Facility, Grants, New Mexico), CLI-98-11, 48 NRC 1 (1998) and *International Uranium (USA) Corporation* (Receipt of Material from

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Tonawanda, New York), CLI-98-23 (Nov. 24, 1998) wherein the NRC affirmed the dismissal of Envirocare's Requests for Hearings in those matters for lack of standing. Envirocare respectfully disagrees with the NRC's decisions and has appealed the decisions to the federal court. While its appeals are pending, Envirocare hereby files this request, in good faith, to preserve its right to participate as a party in a hearing on IUSA's latest license amendment application.

1.3 Envirocare challenges IUSA's license amendment application because IUSA's application fails to satisfy: (1) the requirements of the NRC's "Final Revised Guidance on Disposal of Non-Atomic Energy Act of 1954 Section 11e.(2) Byproduct Material in Tailing Impoundments," (September, 1995); (2) the requirements set forth in 10 C.F.R. part 40; and (3) the standards established by the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4232, the NRC's regulations for the implementation of NEPA, 10 C.F.R. part 51, and the NRC's prior application of NEPA to similarly situated licensees.

II. PETITIONER

2.1 This is a request by Envirocare to the NRC.

2.2 Envirocare is a Utah corporation that is in the business of operating a facility in Clive, Utah, for the disposal of radioactive waste.

2.3 Envirocare is licensed by the NRC to receive and dispose of uranium and thorium byproduct material (as defined in section 11e.(2) of the Atomic Energy Act ("AEA"), as amended).

III. ACTION REQUESTED

3.1 Envirocare requests that the NRC hold a hearing, pursuant to 10 C.F.R. part 2 subpart L, on IUSA's request for an amendment to Source Material License SUA-1358 to allow it to receive, process and dispose of 11e.(2) byproduct material at its White Mesa site.

3.2 Envirocare requests that the NRC comply with its "Final Position and Guidance on the Use of Uranium Mill Feed Material Other than Natural Ores," 60 Fed. Reg. 49297 (the "Guidance"), and prepare a staff analysis of the matters raised by the Guidance. Envirocare requests that if the NRC determines that IUSA has failed to comply with its Guidance, the NRC deny IUSA's license amendment.

3.3 Envirocare requests that the NRC require IUSA to comply with NRC requirements and demonstrate that the St. Louis material will be processed primarily for its source material content, and that the NRC deny the amendment if IUSA cannot make such a showing.

3.4 Envirocare requests that the NRC require IUSA to demonstrate that the proposed amendment meets the standards set forth in 10 C.F.R. part 40 (including appendix A), and that the NRC deny the amendment if IUSA cannot make such a showing.

3.5 Finally, Envirocare requests that the NRC (1) require the preparation of an Environmental Impact Statement ("EIS") for IUSA's license before considering IUSA's

request, and (2) fully evaluate any releases that have occurred from any tailings impoundment.

IV. STATEMENT OF FACTS

4.1 Envirocare was the first private facility in the United States to be licensed by the NRC to accept 11e.(2) material¹ from outside generators for disposal. In licensing Envirocare, the NRC set forth the requirements that an 11e.(2) disposal facility must comply with for licensure. Specifically, the NRC requires:

Compliance with the regulations set forth in 10 C.F.R. part 40, including appendix A. These include stringent site and design criteria, groundwater protection standards, radon barrier requirements, detection monitoring requirements, and inspection requirements.

Preparation by NRC staff of an Environmental Impact Statement ("EIS"), pursuant to 10 C.F.R. part 51, based upon an Environmental Report prepared by the applicant (relating to environmental protection from the harmful effects of land disposal of radioactive waste).

Compliance with administrative and record keeping requirements delineated in 10 C.F.R. §§ 61.80 and 61.82.

Compliance with the waste manifest requirements in 10 C.F.R. § 20.311.

Compliance with the worker safety and other requirements delineated in 10 C.F.R. parts 19, 20, and 21.

See 59 Fed. Reg. 2959 (Jan. 25, 1991); 58 Fed. Reg. 62690 (Nov. 29, 1993); Byproduct Material License No. SMC-1559. Copies of these documents are attached as Exhibit A.

¹ The 11e.(2) material Envirocare is authorized to accept for disposal includes byproduct materials, which consist of tailings or wastes produced by the extraction or concentration of uranium or thorium.

4.2 When Envirocare applied for a license to accept 11e.(2) material for disposal, the NRC also required Envirocare to submit a detailed Environmental Report, which formed the basis of the NRC's decision to require that an EIS be prepared pursuant to the NRC's NEPA regulations. See 10 C.F.R. part 51. Envirocare spent an estimated \$1.675 million for the costs it incurred in preparing the EIS and its license application at the direction of the NRC.

4.3 IUSA has operated a uranium mill at its White Mesa site, at which it has processed materials from its own mine, and from outside generators. IUSA has disposed of the radioactive wastes that were produced as byproducts of its milling operations on site.

4.4 The NRC has issued upgraded Source Material License SUA-1358 for IUSA's mill, pursuant to 10 C.F.R. part 40. This license authorizes IUSA to receive and transfer uranium, possess byproduct material generated by mill operations, and accept limited amounts of byproduct material from in situ leach uranium mining facilities. Publicly-available information indicates that IUSA continued to receive materials from outside generators for processing, and that it continued to dispose of the radioactive waste byproducts on site. A review of publicly-available documents also indicates that this license was approved without the preparation of an EIS. IUSA has subsequently applied for multiple amendments to its license. The NRC did not conduct full environmental review under NEPA for any of these license amendments.

4.5 By letter dated March 2, 1999, IUSA submitted its request for an amendment to Source Material License SUA-1358 in order to allow it to accept for disposal up to 1,029,000 cubic yards of 11e.(2) material from the St. Louis site in addition to the material it already accepts from in situ leaching facilities.

4.6 In seeking its license amendment, IUSA has not demonstrated that it will process the St. Louis material primarily for its source-material content as required by the Guidance.

4.7 Envirocare submits that IUSA cannot make such a demonstration because its proposed amendment does not meet either the financial justification or the co-disposal tests.²

4.8 The financial justification test requires that IUSA (1) certify under oath “that the feed material is to be processed primarily for the recovery of uranium and for no other primary purpose,” and (2) justify the certification, with reasonable documentation, based on “financial considerations, the high uranium content of the feed material, or other grounds.” 60 Fed. Reg. 49297 (emphasis added). Although IUSA has certified under oath that the St. Louis material is to be processed primarily for the recovery of uranium, other facts strongly suggest that disposal and not the recovery of uranium is the primary purpose behind IUSA’s license amendment request. Indeed, the facts demonstrate that the

² In support of its application, IUSA cites to Judge Bloch’s February 9, 1999 Initial Decision relating to the Ashland 2 FUSRAP materials wherein Judge Bloch interprets the NRC’s *Final Position and Guidance on the Use of Uranium Mill Feed Material Other than Natural Ores*. Envirocare respectfully disagrees with Judge Bloch’s interpretation and supports the interpretation articulated in the State of Utah’s Petition for Review dated February 26, 1999. The NRC has yet to decide whether it will review Judge Bloch’s Initial Decision.

payment IUSA will receive to accept the St. Louis material greatly exceeds the small value of the uranium contained within the material. A review of these facts shows that IUSA is attempting to do exactly what the NRC's Guidance is intended to avoid -- "processing [of waste] at a uranium mill primarily to be able to dispose of it in the tailings pile as 11e.(2) byproduct material." 60 Fed. Reg. 49297. Moreover, IUSA has not submitted detailed documentation as required by the Guidance to support its claim that financial considerations justify the processing of the St. Louis material primarily for its source-material content.

4.9 Moreover, Congress has addressed the issue of reprocessing these types of materials under Title I of UMTRCA. The Department of Energy ("DOE") is allowed to recover the residual radioactive materials only after determining that recovery is practicable and the NRC has concurred. The person recovering the materials is required to pay a share of the net profits to the DOE. 42 U.S.C. § 7918(b). IUSA relies upon this section of UMTRCA to support its position. See IUSA's Amendment Request (St. Louis), 3/2/99, Section 5.2 at p.25. The evaluation required under this section is similar to the financial justification test and cannot be satisfied.

4.10 Because IUSA cannot satisfy the NRC's financial justification test, it must demonstrate that it satisfies the co-disposal test. However, IUSA's application also fails to demonstrate that this test has been satisfied. In fact, IUSA has failed to demonstrate satisfaction of the factors articulated in the Guidance, including whether disposition of the material would be approved by the "Regional Low-level Waste Compact" in the

originating and disposal states and whether DOE or the State of Utah has committed to take title to the tailings impoundment after closure. 60 Fed. Reg. 49296. Furthermore, because this material is not regulated under the AEA according to the NRC, it is not legally appropriate for direct disposal in IUSA's mill tailings impoundment and thus cannot satisfy the co-disposal test.

4.11 Envirocare further submits that the NRC must perform a thorough review and analysis of all Environmental Protection Agency, State of Missouri, Army Corps of Engineers and other documents to determine whether the proposed feed material contains any hazardous waste under the Guidance. If the NRC determines that the St. Louis material contains any hazardous waste, IUSA's amendment request must be rejected.

4.12 NRC's NEPA regulations require that an applicant for an amendment to a license issued pursuant to 10 C.F.R. part 40 must submit an Environmental Report with that application. 10 C.F.R. § 51.60. IUSA did not submit an Environmental Report with its application for an amendment to its license to allow it to conduct additional land disposal of 11e.(2) material. No environmental evaluation has been performed.

4.13 NRC's NEPA regulations also require that an EIS be prepared for licensing actions that are major actions that significantly affect the quality of human environment. 10 C.F.R. § 51.20. Those regulations state that renewal of a license authorizing receipt and disposal of radioactive waste from other persons or amendment of such a license relating to closure of a land disposal site are the types of action that require an EIS. 10 C.F.R. §§ 51.20(b)(11) and (12). The detailed requirements set forth in 10 C.F.R. part 40

appendix A also indicate that selection of a disposal site for 11e.(2) byproduct material is a major federal action that has a significant impact on the human environment. Further, IUSA's request for a license amendment effectively asks for renewal of authorization to dispose of radioactive wastes from other persons. Thus, before the NRC considers IUSA's license amendment request, it should require that an EIS be prepared to assess the environmental impact of IUSA's request.

4.14 Additionally, IUSA's amendment application must address the impacts that the shipment of this radioactive waste from St. Louis to Utah will have on the environment. These impacts can include the impact on the highways and public roads from the increased traffic associated with such shipment, and the increased risk of radiological accidents that results from increased numbers of trucks and railcars carrying radioactive wastes to IUSA's facility. IUSA's application fails to fully address these concerns.

V. ENVIROCARE'S SHOWING UNDER 10 C.F.R. § 2.1205(e)

5.1 Envirocare is a "person" whose interest may be affected by the proposed amendment to IUSA's license, and is therefore entitled to file this request for a hearing pursuant to 10 C.F.R. § 2.1205(a).

5.2 In addition to the above, Envirocare makes the following showing in support of its right to request a hearing on IUSA's amendment, pursuant to 10 C.F.R. § 2.1205(e) and (h):

5.3 Interest of requestor in proceeding:
[10 C.F.R. § 2.1205(e)(1)]

5.3.1 Envirocare is in the business of operating a facility in Clive, Utah, for the disposal of radioactive waste, and is licensed by the NRC to receive and dispose of 11e.(2) byproduct material. Envirocare's license complies with strict standards, as set forth in 56 FR 2959.

5.3.2 Envirocare's licensing as a disposal facility provided the public an opportunity to comment on NRC's proposed licensing of Envirocare as a radioactive waste disposal facility. Envirocare was required as a radioactive waste disposal facility in Utah to obtain a ground water discharge permit from the Utah Department of Environmental Quality.

5.3.3 As such, Envirocare has an economic interest in ensuring that all licensees that propose to accept 11e.(2) byproduct material comply with applicable NRC standards. Additionally, Envirocare has an interest, as a member of an environmentally sensitive industry, in ensuring that the environmental laws designed to protect human health and the environment from the hazards of radioactive waste disposal are uniformly applied and enforced by the NRC.

5.4 How interest may be affected by results of proceeding:
[10 C.F.R. § 2.1205(e)(2), (h)(1)-(3)]

5.4.1 If the NRC does not require IUSA's amendment application to comply with the standards in 10 C.F.R. part 40, which Envirocare was required to comply with, Envirocare will be adversely affected in the following ways:

5.4.2 First, compliance with the strict standards applied to Envirocare constitutes a substantial financial burden to Envirocare. For example, 10 C.F.R. part 40 appendix A sets forth stringent site and design criteria, groundwater protection standards, radon barrier requirements, detection monitoring requirements, and inspection requirements. Envirocare is required to construct and operate its byproduct material disposal system in accordance with these standards. If the NRC does not require IUSA to meet the same strict standards, Envirocare will be placed at a severe competitive disadvantage because IUSA's lower costs may allow it to charge lower prices for its services and thereby attract customers away from Envirocare.

5.4.3 Second, the criteria set forth in 56 FR 2959 are designed to protect the public against the health and safety dangers posed by byproduct material. If the NRC does not hold IUSA to the same strict standards, there is a risk that IUSA's operation of the White Mesa facility might result in harm to the public health and safety. Harm to the public resulting from IUSA's operation of the White Mesa facility would create public outcry for additional regulation of all byproduct material disposal facilities, raising costs for all operators in the industry (even those, such as Envirocare, who have operated their facilities in an environmentally safe manner).

5.4.4 Third, the NRC also required the preparation of an EIS for Envirocare's licensing as an 11e.(2) disposal facility, at Envirocare's expense. Preparation of an EIS ensured that (1) any significant adverse effect on the human environment from its facility would be identified and analyzed, (2) alternatives to the license would be

identified and analyzed, (3) the public would have the opportunity to comment on the potential adverse environmental effects, and (4) any adverse effects could then be mitigated. Failure to require the preparation of an EIS means that the potentially negative environmental impacts of, and alternatives to, IUSA's proposed license amendment will not be identified and analyzed, nor will there be public comment and participation as mandated by NEPA. This failure potentially threatens public health and the environment and will undermine public confidence in 11e.(2) radioactive waste disposal facilities.

5.4.5 Fourth, failure to impose comparable requirements on IUSA creates an unfair competitive advantage for IUSA and a concomitant disadvantage for Envirocare. If the NRC does not require IUSA to prepare an EIS for a license to accept 11e.(2) material, it confers an unfair economic (and hence competitive) advantage on IUSA.

5.4.6 Envirocare satisfies the judicial standards for standing. The adverse effects described in the preceding paragraphs satisfy the injury in fact requirement.³

5.4.7 Moreover, Envirocare's financial interests as an operator in the byproduct material disposal business are within the zone of interests protected by the AEA. 42 U.S.C. §§ 2011-2284. The AEA and the regulations promulgated thereunder provide that the NRC in its management of byproduct material shall give due consideration to the economic costs associated with possession and transfer of such material. See 42 U.S.C. § 2114(a)(1), 10 C.F.R. part 40 appendix A.

³ As indicated above, Envirocare respectfully disagrees with the decisions of the NRC relating to the issue of Envirocare's standing in similar matters, and asserts, for the same reasons articulated in its earlier filings, that Envirocare has standing to participate as a party in this matter.

5.4.8 Envirocare's environmental and economic interests are also within the zone of interests protected by both NEPA and the AEA. See 42 U.S.C. § 4331-4332; and 42 U.S.C. § 2114. Both these statutes are designed to protect the public health and the environment, as well as foster the environmentally responsible growth of the nuclear energy industry. Envirocare, as a member of that industry, is in a unique position to help ensure that the NRC lives up to those statutory objectives.

5.4.9 An order by the NRC requiring IUSA's license amendment application to comply with the same AEA and NEPA requirements that Envirocare was required to comply with would prevent the above-described injury to Envirocare's interests.

5.5 Requestor's areas of concern about the licensing activity that is the subject matter of the proceeding:
[10 C.F.R. § 2.1205(e)(3)]

5.5.1 IUSA's proposed amendment is subject to the requirements of 10 C.F.R. part 40. See 10 C.F.R. §§ 40.2, 40.3.

5.5.2 10 C.F.R. part 40 appendix A sets forth stringent site and design criteria, groundwater protection standards, radon barrier requirements, detection monitoring requirements, and inspection requirements.

5.5.3 Applications for license amendments must be filed in accordance with 10 C.F.R. § 40.31. See 10 C.F.R. § 40.44.

5.5.4 10 C.F.R. § 40.31 requires the applicant to clearly demonstrate by means of written specifications in the application, how the requirements of 10 C.F.R. part

40 appendix A have been addressed. Failure to make such a showing is grounds for the NRC to refuse to accept an application.

5.5.5 IUSA's summary application for its proposed amendment fails to set forth written specifications showing that the requirements of 10 C.F.R. part 40 appendix A have been met. See IUSA's request for amendment dated March 2, 1999.

5.5.6 IUSA proposes to process and dispose of newly received byproduct material. As set forth hereinabove, IUSA's license amendment application does not satisfy the requirements of the NRC's Guidance -- there is no showing that the St. Louis material does not contain hazardous waste; IUSA is not processing the material for its source material content; and IUSA does not meet either the economic justification or the co-disposal test within the NRC's Guidance.

5.5.7 NEPA is designed to ensure that federal agencies fully develop information that allows them to consider the environmental impact of their actions, and an EIS is evidence that an agency has considered environmental concerns. NEPA also ensures that the public is made aware of potential adverse environmental effects and has the opportunity to comment on them.

5.5.8 IUSA's application fails to consider the environmental impacts of its request.

5.5.9 Envirocare has concerns under both NEPA and the AEA to ensure that public confidence in low-level radioactive waste disposal sites is not undermined by

the NRC's failure to ensure that adequate information about environmental impacts of a proposed disposal scheme is identified and analyzed.

5.5.10 Envirocare has an economic concern that IUSA has failed to adequately address the environmental impact of its amendment application. Envirocare spent almost \$1.675 million to reimburse the NRC for costs the NRC incurred in considering Envirocare's license application and in preparing an EIS for Envirocare's disposal facility. If IUSA's license amendment is granted, IUSA will save the substantial costs associated with preparing an EIS, costs that it will not have to pass on in fees charged to 11e.(2) waste generators. IUSA will be able to charge lower fees and will gain a competitive advantage over Envirocare.

5.5.11 Envirocare's economic interests are tied to its environmental interest in the safe operation of IUSA's facility. If the environmental impacts of IUSA's license amendment request are not adequately assessed or identified for public comment, public confidence in the safe operation of low-level radioactive waste facilities will suffer. The nuclear energy industry is a controversial and politically sensitive one. If public confidence in the safe disposal of radioactive waste is lost, the future of these facilities will be endangered.

5.6 Circumstances establishing that request for hearing is timely:
[10 C.F.R. § 2.1205(e)(4)]

5.6.1 Section 2.1205(d)(2)(i) states that a request for hearing shall be filed within thirty days of the party receiving actual notice of the license amendment request. Envirocare received actual notice of IUSA's license amendment request on March 26,

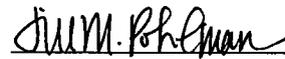
1999. Therefore, by filing this request on Monday, April 26, 1999, Envirocare's request is timely pursuant to 10 C.F.R. § 2.1205(d)(2)(i).

VI. CONCLUSION

For the foregoing reasons, Envirocare respectfully requests that the NRC grant a hearing on IUSA's amendment request pursuant to 10 C.F.R. part 2 subpart L and take the other actions requested in this Petition.

DATED this 26 day of April, 1999.

STOEL RIVES LLP



David Jordan

Jill M. Pohlman

Attorneys for Envirocare of Utah, Inc.

Service of Envirocare of Utah, Inc. may be made on:

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CERTIFICATE OF SERVICE

'99 MAY -7 P3:08

I hereby certify that I caused the original and two copies of the **Request for Hearing of Envirocare of Utah, Inc.** to be mailed, postage prepaid, this 26 day of April, 1999 to the following:

OFFICE OF SEC
RULEMAKING AND
ADJUDICATIONS

Secretary, U.S. Nuclear Regulatory Commission
Attn: Rulemakings and Adjudications Staff
Washington, DC 20555-0001

and a true and correct copy of the foregoing **Request for Hearing of Envirocare of Utah, Inc.** to be mailed, postage prepaid, this 26 day of April, 1999 to the following:

Rulemakings and Adjudications Staff of the
Offices of the Secretary
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

International Uranium (USA) Corporation
Independence Plaza, Suite 950
1050 Seventeenth Street
Denver, CO 80265

Executive Director of Operations
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

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Salt Lake City, UT 84114-0873



56 FR 2959 printed in FULL format.

NUCLEAR REGULATORY COMMISSION

[Docket No. 04008989]

56 FR 2959

January 25, 1991

Envirocare of Utah, Inc.; Receipt of Application for Byproduct Material Waste Disposal License

FOR FURTHER INFORMATION CONTACT: Terry L. Johnson, Uranium Recovery Branch, Division of Low-Level Waste Management and Decommissioning, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 492-3440.

TEXT: Notice of Receipt of Application for Byproduct Material Waste Disposal License

Notice is hereby given that the U.S. Nuclear Regulatory Commission (NRC) has received, by letter dated November 14, 1989, an application and safety analysis report from Envirocare of Utah, Inc., for a license to accept and dispose of uranium and thorium byproduct material (as defined in section 11e.(2) of the Atomic Energy Act, as amended) received from other persons, at a site near Clive, Utah.

The applicant proposes to dispose of high-volume, low-activity section 11e.(2) byproduct material received in bulk by rail and truck.

The material will be placed in earthen disposal cells in lifts and covered with earth and rock. The applicant proposes to conduct operations on a site where the applicant currently disposes of Naturally Occurring Radioactive Material (NORM) under license from the Utah Department of Health, Bureau of Radiation Control.

The State of Utah has recently been granted an amended agreement, pursuant to section 274b. of the Atomic Energy Act, as amended, to expand its regulatory authority to include the disposal of low-level radioactive waste. The authority does not, however, include authority to regulate the disposal of section 11e.(2) byproduct material. Regulatory authority for the disposal of section 11e.(2) byproduct material in the State of Utah remains with the NRC.

The disposal of waste considered in this notice would occur in disposal units separate from those used to dispose of other categories of waste.
Notice of Availability of Applicant's Application

The applicant's application, which describes the natural and proposed design features of the facility, as well as facility operations, is being made available for public inspection at the Commission's Public Document room at 2120 L Street, NW. (Lower Level), Washington, DC 20555.

Notice of the Regulatory requirements That NRC Will Apply in the Review of the Application and in Reaching a Licensing Decision

By this notice, the Commission is establishing the applicability of its regulations to this specific application for the commercial disposal of section 11e.(2) byproduct material.

1. The Commission has determined that 10 CFR part 40, including appendix A, applies to the review of this application to dispose of section 11e.(2) byproduct material. The applicant may request an exemption from any requirements in 10 CFR part 40 that it believes should not apply.

2. The NRC staff will prepare an environmental impact statement (EIS) pursuant to the requirements of 10 CFR part 51. The EIS will be based on the staff evaluation of an environmental report to be prepared by the applicant.

3. Certain administrative and recordkeeping requirements delineated in 10 CFR part 61, subpart G, must be included in the license. These requirements are given in 10 CFR 61.80 and 61.82.

4. The waste manifest requirements contained in 10 CFR 20.311 will be made applicable by a license condition. The licensee will be allowed to accept waste only if it is accompanied by a manifest prepared according to 10 CFR 20.311. Based on the application, the NRC staff may consider, as part of the licensing process, exemptions for certain specific packaging, classification, and labeling requirements contained in 10 CFR 20.311, for land burial, that may not be germane to section 11e.(2) byproduct material waste shipped to the facility. The staff will also require that more information be obtained from the generator on the chemical constituents than the "principle chemical form" as specified in 10 CFR 20.311(b) in order to address the data and groundwater protection requirements of appendix A to 10 CFR part 40.

5. The general requirements of other Commission regulations: 10 CFR part 19 -- "Notices, Instructions, and Reports to Workers: Inspections and Investigations"; 10 CFR Part 20 -- "Standards for Protection Against Radiation"; and 10 CFR Part 21 -- "Reporting of Defects and Noncompliance," will apply according to their terms.

Notice of Opportunity for Hearing

The applicant and any person whose interest may be affected by the issuance of this license may file a request for a hearing. A request for hearing must be filed with the Office of the Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555, within 30 days of the publication of this notice in the Federal Register; be served on the NRC staff (Executive Director for Operations, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852); be served on the applicant (Envirocare of Utah, Inc., 175 South West Temple, suite 500, Salt Lake City, Utah 84101); and must comply with the requirements set forth in the Commission's regulations, 10 CFR 2.105 and 2.714. The request for hearing must set forth with particularity the interest of the petitioner in the proceeding and how that interest may be affected by the results of the proceeding,

including the reasons why the request should be granted, with particular reference to the following factors:

1. The nature of the petitioner's right, under the Act, to be made a party to the proceeding;
2. The nature and extent of the petitioner's property, financial or other interest in the proceeding; and
3. The possible effect, on the petitioner's interest, of any order which may be entered in the proceeding.

The request must also set forth the specific aspect or aspects of the subject matter of the proceeding as to which petitioner wishes a hearing.

The applicant, any person admitted as a party, or an entity participating under 10 CFR 2.715(e), may move the Commission to reconsider any portion of this notice relating to the applicability of 10 CFR 20.311 and 10 CFR 61.80 and 61.82. The petition must be filed within 60 days after the person or entity is admitted to the proceeding and contain all technical or other arguments to support the petition. The motion will be processed under 10 CFR 2.730.

Dated at Rockville, Maryland, this 18th day of January 1991.

For the Nuclear Regulatory Commission.

Samuel J. Chilk,

Secretary of the Commission.

[FR Doc. 91-1756 Filed 1-24-91; 8:45 am]

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Notices

NUCLEAR REGULATORY COMMISSION (NRC)

[Docket No. 40-8989]

Envirocare of Utah, Inc.; Issuance of Facility License

58 FR 62690

DATE: Monday, November 29, 1993

To view the next page, type .np* TRANSMIT.
To view a specific page, transmit p* and the page number, e.g. p*1

Notice is hereby given that the U.S. Nuclear Regulatory Commission (the Commission or NRC), has issued Byproduct Material License N. SMC-1559 to Envirocare of Utah, Inc. which authorizes the receipt, storage, and disposal of 11e.(2) byproduct material (as defined in section 11e.(2) of the Atomic Energy Act of 1954, as amended) at a site near Clive, Utah.

The application for the license complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations. The Commission has made appropriate findings as required by the Act and the Commission's Regulations in 10 CFR chapter I which are set forth in the license. Prior public notice of the overall action involving the proposed issuance of license was published in the Federal Register on January 25, 1991 (56 FR 2659).

The Commission has determined that the issuance of this license will not result in any environmental impacts other than those evaluated in the Final Environmental Statement since the activity authorized by this license is encompassed by the overall evaluation described in the Final Environmental Statement.

For further details with respect to this action, see (1) byproduct Material License SCM-1559; (2) the Commission's Final Safety Evaluation Report, dated June 18, 1993, and Supplement 1; (3) the License Application, and amendments thereto; (4) the Environmental Report, and amendments thereto; and (5) the Final Environmental Statement dated August 1993.

These items are available for inspection at the Commission's Public Document Room located in the Gelman Building, Lower Level, 2120 L Street, NW., Washington, DC.

Dated at Rockville, Maryland this 19th day of November 1993. [*62691]

For the Nuclear Regulatory Commission.

Daniel M. Gillen,

Acting Chief, Uranium Recovery Branch, Division of Low-Level Waste Management
and Decommissioning, Office of Nuclear Material Safety and Safeguards.

[FR Doc. 93-29128 Filed 11-26-93; 8:45 am]

BILLING CODE 7590-01-M

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee		3. License Number
1. Envirocare of Utah, Inc.	46 W. Broadway Suite 240 Salt Lake City, Utah 84101	SMC-1559, Amendment No. 13
2.		4. Expiration Date November 30, 2003
		5. Docket or Reference No. 40-8989

6. Byproduct, Source, and/or Special Nuclear Material

7. Chemical and/or Physical Form

8. Maximum Amount that Licensee May Possess at Any One Time Under This License

11e.(2) byproduct material

Packaged or Bulk Radioactive Waste

5.5 Million Cubic Yards [Applicable Amendment: 5]

This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I, Parts 19; 20; 21; 40, including Appendix A; 51; 61.80; and 61.82 and is subject to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below.

SECTION 9.0: Administrative Conditions

- 9.1 All notices to the Nuclear Regulatory Commission required under this license shall be addressed to the Chief, Uranium Recovery Branch, Division of Waste Management, Office of Nuclear Material Safety and Safeguards.....
- 9.2 Authorized place for use shall be the licensee's facility located in Section 32 of Township 1 S, Range 11 W, Tooele County, Utah, near Clive.
- 9.3 Authorized use is for the receipt, storage, and disposal of 11e.(2) byproduct material in accordance with statements, descriptions, and representations contained in the licensee's application, including appendices, submitted by cover letter dated 12/23/91; as amended by page changes submitted on 07/02/92, 08/10/92, 04/05/93, 04/07/93, 04/10/93, 05/03/93, 05/06/93, 05/11/93, 05/21/93, 07/01/93, 07/25/93, 08/03/93, 08/11/93, 08/19/93, 08/25/93, 01/14/94 (deletes only Operating Procedure TRAIN-1; other documents submitted on this date remain in force), 01/21/94, 03/01/94, 03/08/94, 04/19/94, 06/10/94, 06/29/94, 06/30/94, 07/27/94, 08/03/94, 09/1/94, 01/19/95, 03/24/95, 04/11/95 (deletes only Appendix JJ, Quality Assurance Manual; other documents submitted on this date remain in force), 05/24/95, 06/14/95, 08/25/95, 09/18/95, 04/01/98, 04/08/98, and 04/17/98.

Notwithstanding the above, the following conditions shall override any conflicting statements contained in the licensee's application and supplements.

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[Applicable Amendments: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12]

9.4 In accordance with NRC approved performance based license provisions:

- a) The licensee may, without prior NRC approval, and subject to the conditions specified in Part b of this condition:
 - (1) Make changes in the facility or process, as presented in the application.
 - (2) Make changes in the procedures presented in the application.
 - (3) Conduct tests or experiments not presented in the application.

- b) The licensee shall file an application for an amendment to the license, unless the following conditions are satisfied.
 - (1) The change, test, or experiment does not conflict with any requirement specifically stated in this license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.
 - (2) There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.
 - (3) The change, test, or experiment are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

- c) The licensee's determinations concerning Part b of this condition, shall be made by a Safety and Environmental Review Panel (SERP). The SERP shall consist of a minimum of three individuals. One member of the SERP shall have expertise in management and shall be responsible for managerial and financial approval changes; one member shall have expertise in operations and/or construction and shall have responsibility for implementing any operational changes; and, one member shall be the corporate radiation safety officer (CRSO) or equivalent, with the responsibility of assuring changes conform to radiation safety and environmental requirements. Additional members may be included in the SERP as appropriate, to address technical aspects such as health physics, groundwater hydrology, surface-water hydrology, specific earth sciences, and other technical disciplines. Temporary members or permanent members, other than the three above-specified individuals, may be consultants.

- d) The licensee shall maintain records of any changes made pursuant to this condition until license termination. These records shall include written safety and environmental evaluations, made by the SERP, that provide the basis for determining changes are in compliance with the requirements referred to in Part b of this

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condition. The licensee shall furnish, in an annual report to NRC, a description of such changes, tests, or experiments, including a summary of the safety and environmental evaluation of each. In addition, the licensee shall annually submit to the NRC changed pages to the Operations Plan and Reclamation Plan of the approved license application to reflect changes made under this condition.

[Applicable Amendment: 7]

9.5 In order to assure that no unapproved disturbance of cultural resources occurs, the licensee shall cease any work resulting in the discovery of previously unknown cultural artifacts and report the discovery, in writing, to the NRC and the Utah State Historic Preservation Office (SHPO). The artifacts shall be inventoried and evaluated in accordance with 36 CFR Part 800, and no disturbance shall occur until the licensee has received written authorization from the NRC to proceed.

9.6 Prior to the initial receipt and storage of any 11e.(2) byproduct material at the site, the licensee shall:

- a) establish and implement standard operating procedures (SOPs) for all operational activities involving the handling, storing or disposing of radioactive materials. SOPs for operational activities shall enumerate pertinent radiation safety practices to be followed. In addition, SOPs shall be established and implemented for non-operational activities to include environmental monitoring, bioassay analysis, and instrument calibration. An up-to-date copy of each written SOP, as controlled under the quality assurance (QA) procedures, shall be kept in each area where it is used.
- b) Deleted by Amendment 1
- c) Deleted by Amendment 1
- d) Deleted by Amendment 1
- e) modify the Quality Control/Quality Assurance Plan to provide quality controls for waste sampling and characterization. The plan must also be modified to provide controls for the quality of the protective equipment (e.g., anticontamination clothing and equipment that meets the ANSI Z-88.2 guidance (ANSI, 1989)) and respiratory protection equipment;
- f) design and implement an effective air sampling program in the workplace based on Revision 1 to NRC Regulatory Guide 8.25 (1992) entitled "Air Sampling in the Workplace," or an equivalent program.

[Applicable Amendment: 1]

9.7 Prior to the initial disposal of 11e.(2) byproduct material, the licensee shall:

- a) Deleted by Amendment 1

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- b) Deleted by Amendment 1
- c) Deleted by Amendment 1
- d) Deleted by Amendment 2

[Applicable Amendments: 1, 2]

- 9.8 The licensee shall have all written SOPs reviewed and approved by the CRSO, or designate, qualified by way of specialized radiation protection training equivalent to that required for the CRSO as defined in License Condition 9.10, before being implemented and whenever a change in a procedure is proposed. All existing facility SOPs related to operational and non-operational activities shall be reviewed and documented by the CRSO on an annual basis.

[Applicable Amendment: 7]

- 9.9 Any change to the licensee's corporate organizational structure, as presented in the license application, affecting the assignment or reporting responsibility of the radiation staff shall conform to Regulatory Guide 8.31, "Information Relevant to Ensuring That Occupational Radiation Exposures at Uranium Mills Will Be As Low As Is Reasonably Achievable."

[Applicable Amendment: 7]

- 9.10 The licensee shall have a CRSO responsible for the site who shall report directly to the Vice-President of Compliance/Licensing on matters dealing with radiological safety aspects of the licensed facility. In addition to the responsibilities and qualifications specified in the licensee's application, the CRSO, or his designate shall be qualified as specified in Sections 1.2 and 2.4 of Regulatory Guide 8.31, "Information Relevant to Ensuring that Occupational Radiation Exposures at Uranium Mills will be As Low As Reasonably Achievable," dated May 1983. In addition, the CRSO, or his designate shall have the authorities and responsibilities recommended in Section 2.1 of NRC Regulatory Guide 8.31. The CRSO shall also receive 40-hours of related health and safety refresher training every two years.

The Field Radiation Safety Officer (FRSO) is responsible to the CRSO and works very closely with the Site Manager. Individuals designated as Radiation Technician (RT) and Radiation Monitor (RM) shall report to the Site Manager and the FRSO on matters dealing with radiological safety. In addition, the CRSO, or his designate shall be accessible to the FRSO, RT, and RM at all times. In addition to the responsibilities and qualifications specified in the license application, the FRSO, RM, and RT shall have qualifications as specified in Section 2.4 of Regulatory Guide 8.31, or equivalent. Any person newly hired as an FRSO, RT, and RM shall have all work reviewed and approved by the CRSO as part of a comprehensive training program until appropriate course training is complete, and for at least 6 months from the date of appointment.

For the purposes of this license condition, reference to "uranium mill" or "milling" in NRC Regulatory Guide 8.31 shall mean the licensee's facility and authorized activities.

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[Applicable Amendment: 11]

9.11 The licensee shall conduct:

- a) annual training for its facility inspectors that covers all areas included in the daily inspections of the 11e.(2) byproduct material and the disposal area.
- b) annual operational training that covers all aspects of operational safety and emergency procedures for all employees. The SOPs will be used to conduct operations training to assure consistency and thoroughness.

9.12 The licensee shall maintain an NRC-approved financial surety arrangement, consistent with 10 CFR 40, Appendix A, Criterion 9, adequate to cover the estimated costs, if accomplished by a third party, for completion of the NRC-approved reclamation/decommissioning plan including; above-ground decommissioning and decontamination and groundwater restoration, as warranted.

Annual updates to the surety amount, required by 10 CFR 40, Appendix A, Criterion 9, shall be provided to the NRC at least 3 months prior to August 31 of each year. If the NRC has not approved a proposed revision 30 days prior to the expiration date of the existing surety arrangement, the licensee shall extend the existing arrangement, prior to expiration, for 1 year. Along with each proposed revision or annual update of the surety, the licensee shall submit supporting documentation showing a breakdown of the costs and the basis for the cost estimates with adjustments for inflation, maintenance of a minimum 15 percent contingency, changes in engineering plans, activities performed, and any other conditions affecting estimated costs for site closure. The licensee must also ensure that the surety covers the above-ground decommissioning and decontamination, soil and water sample analyses, and groundwater restoration associated with the site. The basis for the cost estimate is the NRC-approved reclamation/decommissioning plan or the NRC-approved revisions to the plan.

Envirocare's currently approved surety instrument, Escrow Agreement (Account No. 2407000), issued by Zions First National Bank of Utah on February 7, 1996, in favor of the NRC, shall be continuously maintained in an amount not less than \$3,306,888 for the purpose of complying with 10 CFR 40, Appendix A, Criteria 9, until a replacement is authorized by the NRC.

[Applicable Amendments: 1, 6, 8, 9, and 10]

9.13 The licensee shall require a radiation work permit (RWP) for work where the potential for significant exposure to radioactive materials exists and for which no SOP exists. Each RWP shall contain the information specified in Regulatory Guide 8.31.

The CRSO, or designate, qualified by way of special radiation protection training equivalent to that required for the CRSO as defined in License Condition 9.10, shall indicate by signature, the review and approval of each RWP, prior to the initiation of the work.

[Applicable Amendment: 7]

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- 9.14 The licensee shall provide SOPs for controlling internal contamination of workers from dust inhalation, which shall include the use of dust suppressants (e.g., magnesium chloride or water) on all operational roads, as necessary.
- 9.15 The licensee shall have the CRSO, or designate, qualified by way of specialized radiation protection training equivalent to that required for the CRSO as described in License Condition 9.11, perform qualitative respirator fit tests using irritant smoke for all employees required to wear respirators prior to the initial use of a respirator and annually thereafter. During the annual fit test, the CRSO shall ensure that the employee is correctly performing negative pressure fit checks and shall instruct the employee that the fit test is to be performed each time a respirator is donned and prior to entering an area where respirators are required. The licensee shall follow the guidance provided in Regulatory Guide 8.15 "Acceptable Programs for Respiratory Protection." The fit tests and fit instructions shall be documented in the SOPs.
- 9.16 The licensee shall complete "as built drawings" of the facility on a annual basis. The "as built drawings" shall be certified by a professional engineer.
- 9.17 The licensee shall provide for an independent internal audit of facility operations to assure compliance with applicable regulations and license conditions. The independent internal audit will be conducted annually by a qualified health physicist knowledgeable on operations concerning radiation protection programs at milling/waste disposal facilities. The contractor report shall be submitted as part of the annual report.

[Applicable Amendment: 7]

SECTION 10.0: Operational Controls, Limits, and Restrictions

- 10.1 The licensee shall restrict eating and drinking to the administrative offices, and enclosed lunch areas that are separated from the disposal areas. With the exception of drinking from closeable containers, there will be no eating, drinking, smoking, defecating, or urinating in the restricted areas, at any time.
- 10.2 The licensee shall analyze and adequately characterize:
- a) all incoming waste to identify any new hazardous constituents not listed in License Condition 11.1. The licensee shall develop and implement methodologies and procedures for systematic characterization and analysis of the incoming waste, so that any new hazardous constituents are identified. Furthermore, the licensee shall assume that the baseline background concentrations for any new constituents are below their detection levels, unless the licensee demonstrates to NRC staff satisfaction that the constituents will not reach the water table in one year and proceeds to establish background based on direct monitoring of these constituents in the Point of Compliance (POC) wells for one full year.
 - b) the following key radon attenuation model parameter values during placement to verify that the values used in the licensee's radon attenuation model have been achieved: 1) porosity (calculated from as-placed density and specific gravity); 2)

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emanation factor (contaminated material only); and 3) diffusion coefficient for the upper ten feet of 11e.(2) byproduct material and the radon barrier material at several moisture levels, including the long-term moisture content value for that material. Testing shall be conducted at least once every 5000 cy of contaminated and radon barrier material placed or at least two every month of material placement. The licensee shall use American Society for Testing and Materials (ASTM) testing procedures, or the equivalent. Average values for each parameter will be calculated and provided in the annual effluent and environmental monitoring report.

[Applicable Amendment: 4]

- c) the distribution of the ^{226}Ra and ^{230}Th concentrations in the 11e.(2) byproduct material in the upper 3.3 meters (10 feet) of the contaminated material to verify that the concentration in any lift does not exceed the values used in the radon attenuation model. The licensee shall measure the ^{226}Ra and ^{230}Th concentrations using standard analytical procedures, for every 3000 cy of material placed for compaction or at least once a week during material placement. The data will include the elevation (or lift number) of the sample location. The results will be presented as average values for each lift in the annual effluent and environmental monitoring report.

[Applicable Amendment: 4]

- 10.3 The licensee shall assume full responsibility for cleaning up the groundwater of all hazardous constituents detected at the POC in concentrations that exceed the limits specified in License Condition 11.1. It shall be assumed that the 11e.(2) disposal facility is the source of all of the hazardous constituents detected in the POC wells, unless it can be demonstrated to the NRC's satisfaction, based on field and laboratory data, that the 11e.(2) facility is not the source of particular constituents. NRC shall have the final decision concerning any claim by the licensee that the 11e.(2) facility is not the source of a particular constituent that is detected at the POC.

The licensee shall undertake corrective action to clean up groundwater contamination if and when required, no later than 18 months from the date when exceedence of a standard has first been discovered, and without taking credit for any delays caused by disagreements as to the source of contamination. The licensee shall consider and evaluate existing and new groundwater clean-up technologies before selecting and implementing an appropriate clean-up program.

[Applicable Amendment: 7]

- 10.4 The licensee shall continue groundwater and land surface monitoring at all POC locations throughout the post closure period until the disposal facility is transferred to long-term government custody.
- 10.5 The licensee shall implement the quality assurance plan as provided in the license application.
- 10.6 The licensee shall, upon arrival of the waste and before acceptance on site, visually inspect

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the waste or use the Environmental Protection Agency Paint Filter Liquid Test (SW-846, Method 9095) to determine if the waste contains free liquid. The licensee shall not accept any waste containing free liquid for disposal. The licensee however, shall be subject to the following minimum frequency of Paint filter Liquid Test analyses and sample collection requirements: (1) for each waste stream, the minimum number of samples to be analyzed shall be one sample for each shipment (rail or highway) for the first 1,000 yd³ (or any part thereof), and (2) thereafter the minimum number of samples to be analyzed shall be one sample for each set of ten (10) shipments.

[Applicable Amendment: 13]

- 10.7 The licensee shall, upon arrival of waste, perform external exposure rate measurements of the waste conveyances. Any shipment with exposure rates greater than 5 mrem per hour at a distance of 30 cm from any surface, and which cannot be disposed of within 24 hours, shall be posted as a Radiation Area in compliance with 10 CFR 20.1902(a) until disposed.

[Applicable Amendment: 1]

- 10.8 The licensee shall operate the facility in compliance with the following specifications:

- a) The maximum bulk mass of waste disposed of annually will not exceed 4.536×10^5 tonnes (5×10^5 tons).
- b) The maximum annual disposal area will not exceed 229 m x 168 m (equivalent to 38,472 m²).
- c) Deleted by Amendment 1
- d) The total embankment capacity will not exceed 2.52×10^6 m³ (3.3×10^6 yd³).
- e) The maximum volume of waste that may be stored on site prior to disposal will not exceed 2.743×10^4 m³ (9.687×10^5 ft³) at any one time.
- f) Waste with an average concentration above 2,000 pCi/g for any radionuclide in the uranium series or above 6,000 pCi/g for any radionuclide in the thorium series in any truck load or railcar will not be accepted.
- g) Deleted by Amendment 1
- h) Deleted by Amendment 1
- i) The licensee shall manage waste receipt, storage, and disposal operations in such manner as to assure compliance with the effluent concentration limits of Table 2, Appendix B to 10 CFR 20.1001 - 20.2401 and population dose limits of 10 CFR 20.1301

The licensee shall maintain the detailed documents demonstrating compliance with the above specifications on-site and summarize the data in the annual report.

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[Applicable Amendment: 1]

SECTION 11: Inspection, Monitoring, and Recording Requirements

11.1 The licensee shall implement groundwater monitoring programs throughout the duration of this license, to include the following:

- a) Specifically, the licensee shall conduct detection monitoring, compliance monitoring, corrective action monitoring, and post-closure monitoring in accordance with Criteria 5 and 7 of 10 CFR Part 40, Appendix A, the license application dated November 19, 1993, and applicable supporting documents listed in License Condition 9.3, and as required based on the results of groundwater monitoring. The monitoring shall involve sampling and analysis of representative samples from the POC wells defined in the license application. All water samples shall be collected on a quarterly schedule, at least three months apart.
- b) Detection monitoring shall be conducted after the disposal operation is started as described in Criterion 7A of 10 CFR Part 40, Appendix A. Detection monitoring shall include the constituents listed below, or any added through amendment in accordance with License Condition 10.2(a).

Arsenic	Nickel	Acetone
Barium	Selenium	2-Butanone
Beryllium	Silver	Chloroform
Cadmium	Radium-226	Carbon Disulfide
Chromium	Radium-228	1,2-Dichloroethane
Cyanide	Thorium-230	Methylene Chloride
Fluoride	Thorium-232	Naphthalene
Lead	Uranium	2-Methylnaphthalene
Mercury	Molybdenum	Diethylphthalate

- c) Pursuant to License Condition 9.4, the licensee may establish site-specific compliance standards as the higher of 1) background concentrations, or 2) MCLs provided in 10 CFR Part 40, Appendix A, Table 5C - for those constituents already identified in its NRC-approved detection monitoring program. The licensee must submit to NRC for approval, any proposed site-specific standards for newly identified hazardous constituents that are identified in the incoming waste for which a background concentration level has not been approved by NRC in accordance with License Condition 10.2a.
- d) Compliance monitoring shall be implemented by the licensee in accordance with Criteria 7A and 5B(1) of 10 CFR Part 40, Appendix A for those constituents qualifying as hazardous constituents under Criterion 5B(2) of 10 CFR Part 40, Appendix A. The compliance monitoring period for a particular constituent shall continue from the time a site-specific groundwater protection standard for that constituent is established, until this license is terminated. Table STD-1 in the license application provides a list of hazardous constituents that have been detected in the groundwater above background and for which site-specific standards have been established for the

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disposal site.

- e) **Corrective action may be required by NRC if the established standards are exceeded. Corrective action monitoring shall be implemented in conjunction with a corrective action program in order to demonstrate the effectiveness of corrective actions undertaken by the licensee.**
- f) **Post-closure monitoring shall involve monitoring undertaken after the disposal operation is stopped and until license termination.**
- g) **If a baseline background ground-water quality value listed in the attached Table S-1 for any of the above constituents is exceeded, or if a new hazardous constituent, identified based on waste characterization (see License Condition 10.2(a)) is detected in a POC well, the licensee shall take a confirmatory sample within 72 hours, excluding weekends and holidays, and have it analyzed. Upon receipt of the sample analysis, if the second sample does not indicate exceedence/detection, a third sample shall be taken within 72 hours, excluding weekends and holidays, and analyzed. If neither the second nor third samples indicate exceedence/ detection, the first sample shall be considered in error. If the second or third sample indicates exceedence/detection, the licensee shall notify NRC and meet the reporting requirements as stated in License Condition 12.2.**

In addition, within 30 days from the receipt of the analysis results, the licensee shall develop and implement proposed site-specific standards for groundwater protection and develop a written compliance monitoring plan. The compliance monitoring plan will be in accordance with the sampling schedule specified in Part a) of this license condition and in the applicable regulations, for individual constituents that have been detected in the POC wells in excess of the background values.

All water sampling and analysis activities shall be carried out in accordance with the sampling procedures of a certified laboratory. The sampling of the monitoring wells shall be conducted according to acceptable industry standards and in conformance to the proposed quality assurance measures provided in Appendix Z of the license application.

[Applicable Amendments: 1, 2, and 7]

- 11.2 **The licensee shall analyze or submit for analysis by a certified laboratory any monitoring samples within two weeks of the end of the appropriate monitoring compliance period. Inclusion of results into occupational exposure calculations shall be performed within 1 week of receipt of the analysis results. Non-routine samples shall be submitted for analysis by a certified laboratory or the licensee shall begin analysis within 2 working days after sample collection and the CRSO shall review results within 2 working days of receipt of results.**
- 11.3 **The licensee shall require that the CRSO and the Site Engineer perform and document joint inspections of all work areas at least monthly. The licensee shall correct any deficiency noted during the inspection within 7 working days. The results of the inspections and any necessary corrective actions should be reported in the annual report.**

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11.4 The licensee shall:

- a) Monitor the following to demonstrate compliance with Subpart C of Part 20, in addition to any personnel monitoring required by 10 CFR 20.1502:
- (1) Continuously monitor at least the following areas for airborne concentrations of ^{222}Rn and ^{220}Rn as per Section 7.3.2 of the license application (see License Condition 9.3):
 - (i) Waste Unloading Area
 - (ii) Waste Storage Area
 - (iii) Covered Waste Area
 - (iv) Security Guard Trailer
 - (2) Shall perform Airborne Particulate Monitoring as per Section 7.3.1 of the license application (see License Condition 9.3);
 - (3) Shall perform gamma radiation exposure measurements of the work area as per Section 7.3.3 of license application (see License Condition 9.3); and
 - (4) Shall demonstrate that the monitoring locations are representative of the occupational exposure to radiation and radioactive materials.
- b) Monitor the following to demonstrate compliance with Subpart D of Part 20:
- (1) Continuously monitor the site perimeter as per Section 7.4 of the license application (see License Condition 9.3) for ^{222}Rn and ^{220}Rn airborne concentrations;
 - (2) Shall monitor the effluent release of airborne particulates as per Section 7.4 of the license application (see License Condition 9.3) at the air sampling stations listed in Table 7.2 of the license application (see License Condition 9.3);
 - (3) Shall perform gamma radiation exposure measurements of the unrestricted area as per Section 7.3.3 of the license application (see License Condition 9.3); and
 - (4) Shall assume that the measured net values originated solely from the 11e.(2) disposal facility.
- c) Calculate total effective dose equivalent (TEDE) for its occupational workers and the public to demonstrate that the 5000 mrem (50 mSv) and 100 mrem (1 mSv) dose limits, respectively are not exceeded.

SECTION 12: Reporting Requirements

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- 12.1 Deleted by Amendment 4
- 12.2 The licensee shall notify the NRC in the event a baseline background water quality value or a groundwater quality standard established for the site is exceeded; or if a new hazardous constituent that was not originally included in the initial list of hazardous constituents, but was subsequently identified in the incoming waste, is detected in the POC wells - as confirmed by groundwater monitoring. The licensee shall notify Region IV and the Chief, Uranium Recovery Branch, Division of Waste Management, Office of Nuclear Material Safety and Safeguards by telephone within 7 days and by letter within 30 days from the time the exceedence is confirmed, or a new hazardous constituent identified by laboratory analyses (see License Condition 11.1).

The licensee shall submit to the NRC a consolidated groundwater sampling report that summarizes the quarterly groundwater data and analyses as part of the licensee's annual reporting requirement.

[Applicable Amendment: 7]

- 12.3 The licensee shall perform an annual ALARA audit of the radiation safety program which shall be led by the CRSO or designate, qualified by way of specialized radiation protection training equivalent to that required for the CRSO as defined in License Condition 9.10, in accordance with Section 2.3.3 of Regulatory Guide 8.31. The audit team should contain a representative from corporate management. A report of this audit shall be submitted to corporate headquarters and the Chief, Uranium Recovery Branch, Division of Waste Management, Office of Nuclear Material Safety and Safeguards, within 60 days after conducting the audit. The report shall include detailed summaries of the analytical results of the radiological surveys. In order to evaluate the ALARA objective, the licensee shall, at a minimum, review the following records:
- a) Bioassay results including any actions taken when the results exceeded action levels in Table 1 of Regulatory Guide 8.22. "Bioassay at Uranium Mills," dated January 1987.
 - b) Records of external and internal exposure.
 - c) Safety meeting minutes, attendance records, and training program records.
 - d) Daily inspection log entries and summary reports of the monthly reviews.
 - e) Radiological survey and monitoring data, as well as environmental radiological effluent and monitoring data.
 - f) Surveys required by radiation work permits.
 - g) Reports on overexposure submitted to NRC and the State of Utah.
 - h) Reviews of operating and monitoring procedures completed during the period.

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The audit shall also address any noticeable trends in personnel exposures for identifiable categories of workers and types of activities, any trends in radiological effluent data, and the performance of exposure and effluent control equipment as well as its utilization, maintenance, and inspection history. Any recommendations to further reduce personnel exposures or environmental releases of uranium or radon and radon progeny shall be included in the report.

- 12.4 The licensee shall conduct an annual land use survey for a 5 km radius around the site. The purpose is to assess population growth or industry growth in the immediate vicinity of the Clive facility and provide an inventory of domestic and agricultural wells within the survey area. The licensee shall document this survey in the annual report.
- 12.5 The licensee shall immediately notify Region IV and the Chief, Uranium Recovery Branch, Division of Waste Management, Office of Nuclear Material Safety and Safeguards by telephone within 24 hours and by letter within 7 days of any waste shipment where a violation of applicable regulations or license conditions has been found.
- 12.6 The licensee shall, unless otherwise specified, submit an annual report documenting: 1) the annual reporting requirements as specified in the license conditions, 2) the results of calibration of equipment, 3) reports on audits and inspections completed during the year, 4) the results of all meetings and training courses required by this license, and 5) any other significant subsequent information, reviews, investigations, and corrective actions. This report, covering the calendar year, shall be submitted to the NRC by March 1 following the first full year after receipt of this license, and by March 31 every year thereafter. Unless otherwise specified in the NRC regulations, all such documentation shall be maintained at the site and corporate headquarters for a period of at least five (5) years.

[Applicable Amendment: 4]

- 12.7 The licensee shall, at least three months prior to license termination, provide a report which demonstrates the site has met all applicable provisions for license termination and transfer of the facility to the government for long-term custody in accordance with 10 CFR Part 40, Appendix A, Criterion 11. Specifically, the licensee shall document that: (1) the concentrations of all of the listed hazardous constituents at the POC are within their designated concentration limits (standards); (2) if a corrective action program was carried out that the hazardous constituents contaminating the ground-water were returned to their designated limits; and, (3) the facility has been properly decontaminated and decommissioned in accordance with the decontamination and decommissioning plan proposed by the applicant in the license application approved by the NRC. The license termination will not occur until the licensee has demonstrated that these actions have been completed.
- 12.8 The licensee shall immediately report: 1) any failure of the 11e.(2) byproduct material disposal cell that results in a release of waste into unrestricted areas; or 2) any unusual conditions that if not corrected could indicate the potential or lead to the failure of the system and result in a release of waste into an unrestricted area; to NRC Region IV and the Chief, Uranium Recovery Branch, Division of Waste Management, Office of Nuclear Material Safety and Safeguards.

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FOR THE NUCLEAR REGULATORY COMMISSION

Date: May 19, 1998 Joseph J. Holonich

Joseph J. Holonich, Chief
Uranium Recovery Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

**Table STD-1
NRC-Approved Site-Specific Standards
(As of November 20, 1985)**

Constituent	Point of Compliance Monitoring Wells											
	19A	20	24	25	26	27	28	29	57	58	60	63
Inorganic Constituents (mg/l):												
Arsenic^{III}	0.05	0.05	0.05	0.11	0.20	0.050	0.070	0.05	0.05	0.12	0.05	0.05
Radioactive Constituents (pCi/l):												
None												
Organic Constituents (mg/l):												
None												

Site-specific standard for arsenic in different Point of Compliance (POC) wells was established as the higher of: (a) 0.05 mg/l, which is the value for maximum concentration for ground water protection provided for this constituent in 10 CFR Part 40, Table 6C, Appendix A; and (b) approved background concentration in Table S-1 (Revision 1, dated November 20, 1985).

Table 5-1
 NRC-Approved Background Concentrations

Constituent	Point of Compliance Monitoring Wells											
	19A	20	24	25	26	27	28	29	57	58	80	83
Inorganic Constituents (mg/L):												
Arsenic ⁽¹⁾	0.038	0.042	0.032	0.11	0.2	0.058	0.078	0.023	0.028	0.12	0.028	0.034
Barium ⁽¹⁾	0.02	0.023	0.038	0.044	0.044	0.083	0.033	0.038	0.048	0.048	0.037	0.087
Beryllium ⁽²⁾	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Cadmium ⁽²⁾	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Chromium ⁽²⁾	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Cyanide ⁽²⁾	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Fluoride ⁽¹⁾	1.12	0.86	0.83	1.04	0.88	1.18	1.02	0.83	0.88	1.11	0.84	1.08
Lead ⁽²⁾	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Mercury ⁽²⁾			0.00028	0.0002	0.0002	0.00028	0.00038	0.00038	0.00038	0.0008	0.00048	0.00048
Molybdenum ⁽¹⁾	0.00034	0.00048	0.33	0.3	0.70	0.85	0.48	0.37	0.53	2	0.31	0.31
Nickel ⁽²⁾	0.75	0.33	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.38	0.01	0.01
Selenium ⁽²⁾	0.01	0.01	0.008	0.008	0.014	0.008	0.008	0.008	0.008	0.01	0.018	0.008
Silver ⁽²⁾	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Radioactive Constituents												
(pCi/L):												
Radium-226 + 228 ⁽¹⁾			6.47	5.38	4.87	3.85	3.68	8.15	3.38		4.07	4.13
Thorium 230 ⁽¹⁾	3.28	6.87	1.78	2.8	1.87	4.87	1.18	2.28	3.88	6.16	0.0	2.82
Thorium 232 ⁽¹⁾	2.28	1.04	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.84	0.0	0.0
(mg/L):												
Uranium ⁽¹⁾	0.0081	0.013	0.02	0.13	0.033	0.027	0.011	0.040	0.0075	0.038	0.02	0.011
Organic Constituents (ug/L):												
Acetone ⁽²⁾			20	20	20	20	20	20	20	20	20	20
2-Butanone ⁽²⁾	20	20	20	20	20	20	20	20	20	20	20	20
Chloroform ⁽²⁾	20	20	20	20	20	20	20	20	20	20	20	20
Carbon disulfide ⁽²⁾	20	20	20	20	20	20	20	20	20	20	20	20
1,2-Dichloroethane ⁽²⁾	20	20	20	20	20	20	20	20	20	20	20	20
Methylene Chloride ⁽²⁾	20	20	40	40	40	40	40	40	40	20	40	40
Naphthalene ⁽²⁾	40	40	40	40	40	40	40	40	40	40	40	40
Diethylphthalate ⁽²⁾	40	40	40	40	40	40	40	40	40	40	40	40
2-Methylnaphthalene ⁽²⁾	40	40								40		

(1) Background levels in all wells set at (mean + 2 standard deviations).

(2) Background levels in all wells set at analytical detection limit because (mean + 2 standard deviations) is less than the detection limit.

(3) Background levels set at (mean + 2 standard deviations) or analytical detection limit, whichever is larger.

[Applicable Amendments: 2, 3, 6, and 7]