



40-8989

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

NOV 25 1992

Mr. Khosrow B. Semnani, President
Envirocare of Utah, Inc.
215 S. State Street
Suite 1160
Salt Lake City, Utah 84111

Dear Mr. Semnani:

It is unfortunate that I must write to you in regard to the deficiencies in your license application, but the current situation must be addressed. Simply put, your application for a license to receive, store, and dispose of 11e.(2) byproduct material has been of such poor technical quality that I question whether the U.S. Nuclear Regulatory Commission should continue with its review unless major changes are made to your approach to the licensing process and to the license application itself. The purpose of this letter is to impress upon you the seriousness of our concern.

Our primary concern is that your responses and documents have indicated a lack of understanding of the essential technical requirements needed to demonstrate adequate safety and compliance with the regulatory process. Key technical issues that have impacted the reviews are in the areas of radiological assessment and groundwater hydrology. A significant example of this is your treatment of the radiological assessment issue. Although we have repeatedly requested detailed information on the characteristics of the 11e.(2) waste and calculations and models used in your dose assessment since the acceptance review in June 1991, it was not until your June 29, 1992, submittal, more than a year later, that you provided sufficient information for staff to even begin to determine your compliance with 10 CFR Part 20 regulations. As we conducted our technical review, it became apparent that you had not performed a radiological assessment for your proposed 11e.(2) byproduct material disposal site but instead had submitted the assessment done for the State of Utah to support your application for a license to dispose of low-level radioactive waste. As a result, neither the source term nor the approach used in the radiological assessment was technically appropriate. Furthermore, your application did not provide calculated total doses from a source term appropriate for 11e.(2) byproduct material, rather you left it to the reviewer to perform those calculations. Using the 11e.(2) byproduct material weighted average concentrations for Ra-226, Th-232, and Th-230 proposed in your application and your model's conversion factors, we calculated a dose to an off-site individual at the site boundary of about 4,000 mrem/yr, which is an order of magnitude higher than the allowable limits in either the new or old Part 20. Preliminary results of your second dose assessment modeling (using the AIRDOSE code) using a source term more appropriate for an 11e.(2) byproduct material facility, which was transmitted to us on October 20, 1992, also indicated that the effective dose equivalent for a maximally exposed individual at 300m from the site would be 950 mrem/yr. This value still substantially exceeds the allowable dose limits in Part 20. The fact that your staff failed to indicate that these high dose estimates present a

problem, indicates a lack of understanding of our regulations that raises concerns about your ability to provide a reasonable assurance of safety. It was only after we discussed the first high dose value with your staff, that the issue was addressed in the follow-up submittal.

The technical issues in groundwater hydrology are also disconcerting. The most significant technical issue in this area is our request for the technical information to support Envirocare's compliance with Criterion 5E(1) of Appendix A to 10 CFR Part 40. Criterion 5E(1) requires testing of representative tailings solutions and clay liner materials to confirm that no significant deterioration of permeability or stability properties will occur with continuous exposure of the clay to tailings solution. Criterion 5E(1) specifically states that "Tests must run for a sufficient period of time to reveal any effects if they are going to occur..." This information was specifically requested in our February 21, 1992, questions on your license application. Your response of June 29, 1992, indicated that Envirocare was reviewing data to determine if available information would address this issue adequately. No additional information has been provided to date. Since the need for liner testing could become a critical path item, your subsequent failure to provide the required information also raises doubt about your understanding of the regulatory process.

Our June 4, 1991, letter which accepted your application for review, and subsequent correspondence, have carried the message that your license application and Environmental Report (ER) did not contain sufficient technical information and were not of the quality to allow us to make any reasoned judgment on the issues that must be addressed in order to grant you a license. Since then, the NRC staff has committed considerable staff time and resources to the review of your ER and license application. We have asked numerous sets of technical questions in both the environmental and safety reviews and have expended extra time and resources in an attempt to enable your staff to understand the information needed to complete the licensing action and the rationale behind our requests. While the review has finally progressed to the step of preparation of a draft Environmental Impact Statement (dEIS), the Envirocare dEIS must, by necessity, contain abnormal representations (e.g. conservative, bounding dose assessments for the proposed disposal site), since it was not possible to completely resolve all of the outstanding issues on this subject before going forward with the preparation of the dEIS. Normally, the environmental impacts in the dEIS would be assessed by using realistic estimates. Many steps in the review remain to be completed, especially in the Safety Evaluation Review, which currently is approximately 3 months out of phase with the environmental review. Substantially more information will be required from Envirocare to complete the safety review, and we do not want to continue with the same large expenditure of NRC resources that has been required to date to resolve issues.

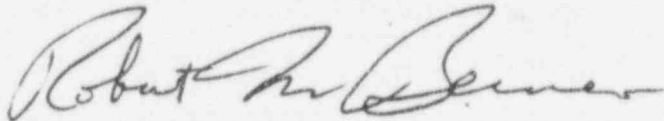
Your past failure to provide the NRC staff with sufficient information to assess your license application has resulted in a number of schedule slips. These failures necessitate a major revision to the environmental and safety review schedules. Based on your past performance and the fact that it was not

until your most recent submittal, dated November 4, 1992, that an acceptable ER was provided, we believe that an optimistic schedule for the issuance of the license could not be earlier than November 1993. It should be noted that the projected completion date will slip every time a milestone completion date is missed, or inadequate information is provided.

By copy of this letter, we are informing organizations and individuals that have expressed an interest in the status of your license application, including both Kerr-McGee and the U.S. Department of Energy, of the current schedule slip and our concerns about the possibility of further delays in the license review process while we wait for a satisfactory application. Perhaps some of these organizations can assist you by sharing their technical and regulatory expertise. Without improved submittals of technical information, there is doubt about whether the licensing process can be completed in accordance with the current projected schedule.

Based on Envirocare's poor performance, Mr. James M. Taylor, the Executive Director for Operations, and I would like to meet with you to discuss these serious concerns. My staff will be in contact with you within the next few days in order to set a date for this meeting at NRC headquarters.

Sincerely,



Robert M. Bernero, Director
Office of Nuclear Materials Safety
and Safeguards

cc: See attached list

Mr. Larry Anderson, Director
Utah Department of Health
P.O. Box 16690
Salt Lake City, Utah 84111

Mr. Richard Wallace
Pacific Northwest Laboratories
P.O. Box 999, K6-77
Richland, WA 99352

The Honorable Paul Contillo
New Jersey Senate
Hackensack, NJ 07601

The Honorable Patrick J. Roma
New Jersey General Assembly
40 East Midland Avenue
Paramus, NJ 07652

Mr. Leo Duffy
Assistant Secretary
Environmental Restoration
and Waste Management
U.S. Department of Energy
Washington, D.C. 20585

Mr. David Hiller
Attorney at Law
1737 Gaylord Street
Denver, Colorado 80206

The Honorable Matthew Feldman
New Jersey Senate
500 Frank W. Burr Boulevard
Teaneck, NJ 07666-6880

Mr. Richard J. Donohue
Counselor at Law
47 Summit Avenue
Hackensack, NJ 07601

Paul J. Merges, Ph.D.
New York Department of
Environmental Conservation
50 Wolf Road
Albany, NY 12233

Mr. G. Rice
Kerr-McGee Corporation
Kerr-McGee Center
Oklahoma City, OK 73125

Distribution:

NMSS Ticket No. 92-489 (EDO 9200183)

Docket No. 40-8989

Central File#

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LLWM r/f

LLUR r/f

PDR

ACNW

HThompson

RBangart

WBrach

PLohaus

JSurmeier

JAustin

MFliegel

DGillen

SWastler

DRom

LHamdan

TJohnson

RAbu-Eid

LBykoski

PGarcia,URFO

LPittiglio

DSollenberger,GPA/SP

JCallan,RIV

CHackney,RIV,SLO

JGilliland,RIV,PAO

RHall,RIV,URFO

RFonner,OGC

MFinkelstein,OGC

STurk,OGC

SUttal,OGC

TCombs,GPA/CA

MKnapp

CDeFino

CPoland

JScinto

JChandler

VMiller

JTaylor

CCameron

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Original signed by
Robert M. Bernero

Robert M. Bernero, Director
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and Safeguards

cc: See attached list (Distribution also)

SUBJECT ABSTRACT: ENVIROCARE LICENSING ACTION

*See Previous Concurrence

OFC	LLUR*		LLUR*		LLUR*		LLWM*	
NAME	SWastler/eb		MFliegel		JSurmeier		WBrach	
DATE	11/13/92		11/13/92		11/13/92		11/17/92	
OFC	LLWM*		OGC*		NMSS*		NMSS	C
NAME	RBangart		JScinto/telecon		GArlotto		RBernero	
DATE	11/20/92		11/23/92		11/23/92		11/25/92	

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