



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 30, 1999

Mr. Charles E. Jensen
President
Diversified Technologies Services, Inc.
2680 Westcott Boulevard
Knoxville, TN 37931-3111

Dear Mr. Jensen:

The U.S. Nuclear Regulatory Commission has completed its review of the Topical Report (TR) Addendum, DT-VERI-100-NP/P-A, Revision 1, Addendum 1, "ENCAP™ Encapsulation Utilizing the VERI™ Solidification Process." The technical review included information that was contained in the TR Addendum, and further information that was submitted as a result of the review. The Technical Evaluation Report (TER) for this review is enclosed.

Staff has concluded that the TR Addendum, supplemented by additional information that was provided in response to staff comments and questions adequately describes low-level radioactive waste forms produced through use of the ENCAP™ process. This process applies to encapsulation of spent filter cartridges using the previously approved VERI™ [vinyl ester resin in-situ] process for solidification of spent ion exchange resins.

Staff also concludes that the solidified encapsulation waste forms described meet the structural stability requirements of 10 CFR 61 for the disposal of Class B and Class C wastes. These conclusions are based on satisfactory completion of a final revised TR Addendum, which should include all applicable information developed during the technical review and a copy of the enclosed TER Addendum. The following conditions shall also be met:

1. The ENCAP™ encapsulation process shall be used in accordance with the limitations called out in Section 3.1 of the enclosed TER Addendum, and all additional restrictions and requirements specified by the disposal facility operators and governing state agencies.
2. Diversified Technologies must notify users of the ENCAP™ encapsulation process that they shall certify that all restrictions and required procedures have been adhered to, and that the waste forms do not contain proscribed chemicals or waste materials.
3. Diversified Technologies must resolve the outstanding issues specified in Section 3.2 of the enclosed TER Addendum.

Note that final approval is contingent on completion of a revised TR Addendum which includes satisfactory resolution of the outstanding issues in item 3 above. The revised TR Addendum should be submitted to NRC within 90 days of this letter.

It should be noted that notwithstanding NRC's decisions on the adequacy of the ENCAP™ encapsulated wastes, the sited States have regulatory authority concerning the conditions of acceptance of waste forms at their disposal facilities. It is therefore the licensee's responsibility

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to contact the State regulatory authorities to determine the acceptability of the polymer encapsulated wastes at their State's facilities.

Copies of the enclosed TER Addendum, and this letter are being forwarded to the States of South Carolina, and Washington for their information and use.

Note that the low-level waste (LLW) TR review process at the NRC has been discontinued. The enclosed TER Addendum was written for the Diversified Technologies TR Addendum review that was in progress at the time of the review process termination. No other LLW TR reviews will be performed by NRC.

If you have any questions on this matter, please contact Jennifer Davis at (301) 415-5874, or bjd1@nrc.gov.

Sincerely,

[Daniel Gillen, for]
Thomas H. Essig

Thomas H. Essig, Chief
Uranium Recovery and
Low-Level Waste Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure: as stated.

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C. Jensen

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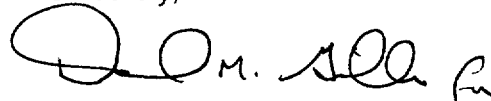
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Sincerely,

A handwritten signature in black ink, appearing to read "T. H. Essig". The signature is fluid and cursive, with a large initial "T" and "H".

Thomas H. Essig, Chief
Uranium Recovery and
Low-Level Waste Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure: as stated.