



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

JAN - 4 1993

Mr. Charles E. Jensen  
Vice President, Operations  
Diversified Technologies, Inc.  
103 Dixon Drive  
Chestertown, MD 21620

Dear Mr. Jensen:

The Nuclear Regulatory Commission has completed its review of topical report, DT-VERI-100-NP/P, "VERI™ (Vinyl Ester Resin In Situ) Solidification Process for Low-Level Radioactive Waste." The technical review included information contained in the topical report (TR), and further information that was submitted as a result of the review. The Technical Evaluation Report (TER) for this review is enclosed.

We have concluded that the topical report 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 VERI™ process. This process applies to the solidification of two waste streams, mixed bed bead resins, and LOMI resins.

We also conclude that the solidified 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 predicted based on satisfactory completion of a final revised topical report which should include all applicable information developed during the technical review, a copy of the enclosed TER, and the following conditions:

1. The VERI™ waste solidification process shall be used in accordance with the limitations called out in Section 3.1 of this Technical Evaluation Report, and all additional restrictions and requirements specified by the disposal facility operators and governing state agencies.
2. Diversified Technologies must notify users of the VERI™ waste solidification 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 characterize the chemical nature of the resins used in the qualification tests so that users of the process can know what kind of resins can be satisfactorily solidified. This information must be clearly specified in the final revised TR and operating procedures.
4. Diversified Technologies must resolve the outstanding issues specified in Section 3.2 of the enclosed TER.

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Charles Jensen

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Note that Final Approval is contingent on completion of a revised TR which includes satisfactory resolution of the outstanding issues in 3 and 4 above. The revised topical report should be submitted to the NRC within 90 days of this letter.

It should be noted that notwithstanding NRC's decisions on the adequacy of the VERI™ polymer solidified 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 to contact the State regulatory authorities to determine the acceptability of the polymer solidified wastes at their State's facilities.

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

If you have any questions on this matter, please contact me at (301) 504-3450, or Jennifer Davis at (301) 504-2697.

Sincerely,

ORIGINAL SIGNED BY

John Thoma, Section Leader  
Technical and Special Issues Section  
Low-Level Waste Management Branch  
Division of Low-Level Waste Management  
and Decommissioning  
Office of Nuclear Material Safety  
and Safeguards

Enclosure:  
As stated

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