

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

OCT 2 5 1990

MEMORANDUM FOR:

John J. Surmeter, Chief

Technical Branch

Division of Low-Level Waste Management

and Decommissioning, NMSS

THRU:

Michael Tokar, Section Leader

Engineering Section, Technical Branch Division of Low-Level Waste Management

and Decommissioning, NMSS

FROM:

Everett Wick

Engineering Section, Technical Branch Division of Low-Level Waste Management

and Decommissioning, NMSS

SUBJECT:

ADDENDUM TO SUMMARY OF AUGUST 23, 1990 MEETING

BETWEEN NRC. BONDICO. AND SAIC

The subject addendum is enclosed. After reviewing the summary of the August 23, 1990, meeting issued September 14, 1990, the Bondico Nuclear representative felt that Bondico's position on hydrolytic degradation of fiberglass-reinforced plastic tankage in earth burial conditions was incompletely stated. Accordingly, at our suggestion, Bondico forwarded some comments that it considers crucial to this matter. These comments are hereby issued as an addendum to the meeting summary. These comments apply to item 6 of the summary which lists Bondico's responses to NRC comments on Bondico's Topical Report on its HIC-7 high integrity container (Docket Number WM-94).

Everett Wick

Engineering Section, Technical Branch Division of Low-Level Waste Management

and Decommissioning, NMSS

Enclosure:

Addendum to Meeting Summary

cc: Attendees w/enclosure

ADDENDUM TO SEPTEMBER 14, 1990, SUMMARY OF AUGUST 23, 1990, MEETING BETWEEN NRC. BONDICO, AND SAIC

This addendum consists of comments provided by Bondico Nuclear after review of the meeting summary. Those comments apply to item 6 of the meeting summary. which lists Bondico's responses to NRC comments on Bondico's Topical Report (TR) (Docket Number WM-94). The Bondico comments are:

- Neither SAIC or NRC has presented any factual basis that FRP undergoes any significant hydrolytic degradation under realistic earth burial conditions, i.e. at temperatures about 15-20°C and when burial is well above the underground water table so that the HIC is never submerged a water.
- The only data presented by SAIC is based upon 2. experiments performed on plastics under water immersion and at elevated temperature conditions in the temperature range of 70-100°C. Industry experts who have made thousands of FRP underground storage tanks have stated that extrapolation downward from such test conditions has been shown to under predict the service life of actual FRP tankage.
- The industry experts have cited actual earth burial experience with FRP tanks that has shown that the FRP material after 25-30 years of burial service has essentially retained its physical strength properties. Thus there is no actual experience or data to indicate any significant signs of hydrolytic degradation after such periods of earth burial, even under water submergence conditions.

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