



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

DEC 05 1990

Docket No. WM-095

Mr. Robert S. Watterson, III, President  
Avancer Technologies, Inc.  
9801 Kinsey Avenue  
Suite 100  
Huntersville, NC 28078

Dear Mr. Watterson:

This letter is in response to a letter dated August 13, 1990, from Mr. Ed Day of Avancer, as well as your letter dated October 19, 1990, notifying the Nuclear Regulatory Commission (NRC) of the change in ownership of the Topical Report (TR) being reviewed under the WM-095 docket. In addition, the NRC has received a letter from Babcock and Wilcox (B&W) dated October 19, 1990, providing the necessary information for the transfer to be made in the WM-095 files. Now that the NRC has been officially notified of the transfer, we can proceed on the TR.

With regard to the transfer of ownership from B&W to Avancer, the B&W letter stated that the B&W name and the "Ecosafe" trademark were not transferred in the arrangement between the two parties. The NRC needs to understand what Avancer plans to do with the existing TR in its current form. The cover and text use the B&W (and the McDermott Company) name and the "Ecosafe" trademark throughout the volume. Is Avancer planning a revision to the TR to remove the names and trademark or is some other approach going to be used? Please provide the NRC with information regarding Avancer's intent.

With regard to the outstanding technical questions related to the TR, under Docket No. WM-095, there is a set from the South Carolina Department of Health and Environment Control (SCDHEC) dated July 26, 1989, and transmitted on the docket case to the applicant by NRC letter dated August 18, 1989. In addition, there is an outstanding set of technical questions from the NRC dated April 19, 1989.

Enclosure 1 provides a list of the significant communications since the two sets of questions were provided to B&W and Avancer. Avancer was at that time a joint partner with B & W for the purposes of the TR. An examination of that Enclosure will reveal that the last deadline for the complete response defined in the March 13, 1990, letter to B&W was June 1, 1990. This date passed over five months ago. Additionally, nearly six months have passed since Avancer and B&W were provided with the necessary guidance to complete the request for transfer of Docket WM-095 from B&W to Avancer. The initiative for action rested with Avancer after April 27, 1990.

With respect to the letter from Avancer dated August 13, 1990, which we can now comment on since the necessary transitional letters have been received (October 24, 1990), we have the following comments:

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PDR WASTE  
WM-95 PDC

WM-95  
NL14

1. While a finite element analysis may be used to represent a more exact analysis, there is no requirement for a finite element analysis. As in most situations, a less sophisticated analysis coupled with larger design margins can be as acceptable as a more exact analysis with slimmer margins.
2. With respect to NRC Questions 15 and 16, the questions were posed because of the need to be able to determine whether or not the polymeric materials will remain intact over 300 years in order to protect the carbon steel portion of the High Integrity Container (HIC) from the effects of external corrosion. It should also be noted that while the polymeric laminate material in your design concept is not relied upon for structural integrity, if the material is to remain fully bonded to the carbon steel, any loading effects on the composite assembly will result in stresses within the polymeric material.
3. All outstanding written questions transmitted on Docket WM-095 are to be responded to.
4. The addition of the 3/4" diameter passive vent, the design of which has existed previously, should not negate previous drop tests for the Department of Transportation (DOT) Type A requirements since the penetration used appears to be identical to the plug penetration used in the HIC.

A schedule for submittal of any responses that could not be provided was to have been made available to the NRC by April 2, 1990. All responses were due by June 1, 1990. As of this date, we are unaware of any new technical issues that have arisen since the SCDHEC questions were provided to the applicant by letter of August 18, 1989. No written information has been received in response to the outstanding questions.

Based on these facts, our intent is to discontinue all work on this TR and close Docket WM-095 as of January 15, 1991, unless the outstanding questions are responded to in writing prior to that date.

We look forward to your response.

Sincerely,  
**(SIGNED) RICHARD L. BANGART**

Richard L. Bangart, Director  
 Division of Low-Level Waste Management  
 and Decommissioning  
 Office of Nuclear Material Safety  
 and Safeguards

Enclosure:  
 Significant Communications  
 on WM-095

cc: E. Day - Avancer

	Docket No. WM-095			
Distribution:	Central File#	NMSS r/f	LLTB r/f	RShewmaker
MTokar	JSurmeier	PLohaus	JAustin	JGreeves
RBangart				
PDR YES	<input checked="" type="checkbox"/>	NO	Category: Proprietary	or CF Only
ACNW YES	<input checked="" type="checkbox"/>	NO		

\*SEE PREVIOUS CONCURRENCE

OFC :LLTB*	:LLTB*	:LLTB*	:LLWM*	:LLWM
NAME:RShewmaker/eb	:MTokar	:JSurmeier	:JGreeves	:RBangart
DATE:12/03/90	:12/03/90	:12/03/90	:12/05/90	:12/05/90

1. While a finite element analysis may be used to represent a more exact analysis, there is no requirement for a finite element analysis. As in most situations, a less sophisticated analysis coupled with larger design margins can be as acceptable as a more exact analysis with slimmer margins.
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4. The addition of the 3/4" diameter passive vent, the design of which has existed previously, should not negate previous drop tests for the Department of Transportation (DOT) Type A requirements since the penetration used appears to be identical to the plug penetration used in the HIC.

A schedule for submittal of any responses that could not be provided was to have been made available to the NRC by April 2, 1990. All responses were due by June 1, 1990. As of this date, we are unaware of any new technical issues that have arisen since the SCDHEC questions were provided to the applicant by letter of August 18, 1989. No written information has been received in response to the outstanding questions.

Based on these facts, our intent is to discontinue all work on this TR and close Docket WM-095 as of December 31, 1990, unless the outstanding questions are responded to in writing prior to that date.

We look forward to your response.

Sincerely,

Richard L. Bangart, Director  
 Division of Low-Level Waste Management  
 and Decommissioning  
 Office of Nuclear Material Safety  
 and Safeguards

Enclosure:  
 Significant Communications  
 on WM-095

cc: E. Day - Avancer

Docket # WM-095  
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 MTokar      JSurmeier      PLOhaus      JAustin      JGreeves  
 RBangart  
 PDR YES      \_\_\_      NO      \_\_\_      Category: Proprietary      \_\_\_      or CF Only      \_\_\_  
 ACNW YES      \_\_\_      NO      \_\_\_

OFC :LLTB	:LLTB	:L'TB	:LLWM	:LLWM
NAME:RShewmaker/eb	:MTokar	:JSurmeier	:JGreeves	:RBangart
DATE: 12/3/90	: 12/3/90	: 12/3/90	: 12/5/90	: / /90

Significant Communications on WM-095

1. July 26, 1989 Meeting of NRC, B&W and Avancer on the NRC questions in the Request for Additional Information.
2. Aug. 21, 1989 Letter from Day (Avancer) to Widmayer (NRC) addressing NRC question list of April 19, 1989, and Questions 5b, 7, and 16. Posed two questions to NRC regarding why there was a need for mechanical data on the coating and what the most severe wastes the NRC expected would be encountered.
3. Sept. 20, 1989 Letter from Widmayer (NRC) to Day (Avancer) providing the clarifications and answers requested on August 21, 1989.
4. November 1989 Widmayer (NRC) and Howard (B&W) discussed review of the TR via telephone.
5. Dec. 4, 1989 Widmayer (NRC) and Howard (B&W) continued the November discussion.
6. Dec. 13, 1989 Letter from Tokar (NRC) to Howard (B&W) stating NRC policy on lack of responsiveness to the outstanding questions on the TR. NRC requested responses to the April 19, 1989, letter or request to withdraw the TR from further review. Response to this December 1989 letter to be within 30 days.
7. Jan. 12, 1990 Widmayer (NRC) and Howard (B&W) discussed by telephone that the response to the December 1989 NRC letter would be sent in the following week, but it would not include responses that would require significant NRC review and effort.
8. Jan. 24, 1990 Widmayer (NRC) and Howard (B&W) discussed the response to the NRC. It was still in the management review chain at B & W. Howard indicated it would not answer the RAI, and would also not withdraw the TR from review. New target date for issuance was the following week.
9. Jan. 31, 1990 Letter from Howard (B&W) to Tokar (NRC) in response to the December 13, 1989, NRC letter noted changes in market for the product and the need to discuss the situation with the licensor, Avancer. B&W requested a 60-day NRC work suspension on the TR during which time B&W would make a decision on completion or termination of the TR review.

Enclosure



10. March 13, 1990 Letter from Tokar (NRC) to Howard (B&W) stating that a position is required from B&W by April 2, 1990, and if B&W does not commit to supplying the responses by June 1, 1990, the NRC will discontinue the review.
11. March 28, 1990 Letter from Watterson (Avancer) to Tokar (NRC) requesting transfer of TR review docket to Avancer on April 13, 1990. Meeting with the NRC staff on April 11, 1990, to submit partial responses and schedule the remaining responses.
12. March 30, 1990 Letter from Howard (B&W) to Tokar (NRC) stating that as a result of an agreement, Avancer will pursue the resolution of issues on the TR and B&W will cease involvement as of April 13, 1990.
13. April 2, 1990 Meeting of NRC, B&W and Avancer. Stated by the applicants that B&W was withdrawing from the support of the TR and Avancer would formally take over as the "owner" of the TR. Avancer indicated they would be prepared in a very short time to respond to most questions. Avancer requested a meeting for April 11, 1990, where the proposed responses could be discussed. Also discussed was the need for NRC guidance on the mechanism to execute the formal transfer of the TR within the NRC records, including the declarations required relative to proprietary information.
14. April 11, 1990 Brief meeting among Day (Avancer), Tokar and Shewmaker (NRC) with partial draft responses not being accepted by the NRC. Noted by Tokar that all responses are past due. Also noted, that the full response should be in within 60 days but not later than 90 days. Question of need for additional testing arose and that was left to be discussed by phone when Avancer had determined their position.
15. April 27, 1990 Shewmaker (NRC) faxed to Day (Avancer) and Howard (B&W) the necessary guidance to be used to complete the transfer of applicant identification for the TR under docket WM-095.
16. Oct. 19, 1990 Letters from Howard (B&W) and Watterson (Avancer) to complete the transfer.