



RDR  
 Hittman 71-9086  
 Nuclear & Development Corporation  
 9190 Red Branch Road  
 Columbia, Maryland 21045  
 301/730-7800

Refer to:  
 HN-E488

March 9, 1981



Mr. Charles MacDonald, Chief  
 Transportation & Certification Branch  
 Division of Fuel Cycle & Fuel Safety  
 U.S. Nuclear Regulatory Commission  
 Washington, D.C. 20555

Subject: HNDC HN-100 Series 1 Radioactive Materials Package  
 Certificate of Compliance No. 9086, Revision 5  
 Transmittal of Additional Information

Reference: (A) HNDC HN-E316 Letter, Dated 10-7-80  
 (B) NRC Letter FCTC:RH071-9086, Dated 11-24-80

Dear Mr. MacDonald:

Hittman Nuclear & Development Corporation (HNDC), in Reference (A), transmitted revised drawings and an Addendum to the Safety Analysis Report for the subject Certificate of Compliance and requested that the certificate be amended to reference the revised drawings. Nuclear Regulatory Commission (NRC), in Reference (B), requested additional information in connection with its review of the Reference (A) Certificate of Compliance amendment request. This letter transmits revised drawings and a revised safety analysis report addendum in resolution of the NRC comments of Reference (B).

Enclosed are eight (8) copies of HNDC Drawings Nos. C001-5-9125, Rev. 1, C001-5-9126, Rev. 1, and Revision 2 of "Addendum #1 Safety Analysis Report for the HN-100 Series 1 Radwaste Shipping Cask". These documents replace earlier revisions transmitted by Reference (A). HNDC Drawing C001-5-9127, Rev. 0, originally submitted by Reference (A), remains unchanged as a result of resolution of NRC comments. It is requested that the subject certificate be changed to reference drawings C001-5-9125, Rev. 1, C001-5-9126, Rev. 1, and C001-5-9127, Rev. 0.

Attachment A lists the changes that have been made in the drawings and the Addendum to the Safety Analysis Report and provides resolution of the specific NRC comments of Reference (B).

I trust that the additional information contained in this letter will allow you to complete your processing of the amendment application. Should you have any questions or require further information, please contact me.

Very truly yours,  
  
 Charles W. Mallory  
 Vice President, Engineering

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ATTACHMENT A

Radioactive Materials Package  
Certificate of Compliance No. 9086  
HNDC Model HN-100 Series 1

The information and drawings submitted by this letter supplement information and drawings previously transmitted by HNDC letter HN-E316, dated 10-7-80. NRC comments of FCTC:RH071-9086, dated 11-24-80 are resolved as follows:

1. Drawing Nos. C001-5-9125 and C001-5-9126 have been revised to indicate nominal dimensions. A tolerance block has been added to the drawings to reflect the fabrication tolerances that were used during fabrication of the casks. The Safety Analysis Report Addendum has been revised to reflect the worst case dimensions. There are no reference dimensions shown on Drawing C001-5-9127 that are used in the Safety Analysis Report Addendum.
2. Those dimensions previously marked with an asterisks (\*), have been revised to nominal dimension and are subject to the tolerances discussed in Item 1 above.
3. The Safety Analysis Report Addendum has been revised to reflect the tie down lug offset of 1.75 inch. The original methods and models used to analyze the stress in the shell were taken from research papers. The Safety Analysis Report Addendum has been revised to use the analytical methods contained in the Welding Research Council Bulletin No. 107. This analytical method provides a positive margin of safety for both Grade 55 and Grade 70 steel.
4. As discussed in Item 3 above, the analytical method for analysis moments in the shell have been revised.

Several minor typographical and mathematical errors noted in the Addendum have been corrected in this revision.

HNDC therefore requests that paragraph 5a(3) of Certificate of Compliance No. 9086 be revised to read as follows: "The packaging is fabricated in accordance with Hittman Nuclear & Development Corporation Drawings Nos. C001-5-9125, Rev. 1; C001-5-9126, Rev. 1; and C001-5-9127, Rev. 0."