

Nuclear Fuel Cycle Packaging

200 W. Railroad Street PO Box 68 Columbiana, OH 44408-0068 USA Tel: 866-428-1603 or 330-482-5604 Fax: 330-482-3390 E-mail: sales@cbco.com

71-9288

June 27, 2003

Mr. William E. Brach
Licensing Section, Spent Fuel Project Office
Office of Nuclear Material Safety and Safeguards
United States Nuclear Regulatory Commission
11545 Rockville Pike
Rockville, MD 20852

COPY

RE: Request for expedited review of application for certain revisions to USA/9288/AF-85 (OP-TU)

Dear Mr. Brach,

The subject application is being made in support of the US DOE National Nuclear Security Agency Agreement DE-SA 109-00 SR 18976/TVA No. P009NA-249655-01, dated April 5, 2001.

In addition, the subject application will result in the immediate production of thirty-two (32) units of OP-TU to transport Type B UO2 material. The OP-TU production will have a material impact on the employment at our production facilities. As many as twenty (20) direct hour and salaried employees will be impacted by this application

Accordingly, we request an expedited review process.

Thank you in advance for your consideration of this request.

Sincerely,

Thomas F. Dougherty

Chairman

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cc: Mr. David H. Tiktinsky,
Ms. Nancy Osgood
(cover letter and Attachment 1 only)

Re: Submittal of the Safety Analysis Report for the Model CHTFE Oxide Package
Transport Unit (OP-TU) Revision 5 and Request for Revised Package Certification
(NRC Certificate of Compliance USA/9288/AF-85)

Dear Mr. Brach,

Columbiana Hi Tech Front End (CHTFE) respectfully requests that the current certification for the packaging be revised to allow the additional contents as described in the revised Safety Analysis Report (SAR). Included with this letter are ten (10) copies of the SAR for the Model CHTFE Oxide Package Transport Unit (OP-TU) Revision 5 for your review.

The original submittal for licensing of the OP-TU was made in 1999 for a Type A fissile material packaging. However, it has always been the intent of CHTFE to resubmit for additional contents and Type B status for the packaging. Thus, when the original prototype drop and fire tests were performed, the packaging was documented to provide leak-tight performance. In 2001, Framatome-ANP became interested in the packaging and asked CHTFE to upgrade it to Type B status to carry the reprocessed uranium oxide resulting from the DOE Off-Specification Fuel Program.

CHTFE and Framatome-ANP met with the NRC on a number of occasions to specifically discuss the changes to the packaging required to meet the needs of the Customer. At this meeting, each change to the packaging design and manufacture were discussed. The modified design of the OP-TU incorporates the following changes:

- 1. The insulation specifications have been modified,
- 2. The fiberboard insulation in the Outer Lid has been replaced with foam insulation,
- 3. The plywood in the bottom of the Transport Unit has been replaced with foam insulation,

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- 4. The intermediate lid has been removed from the design,
- 5. The number of bolts at the Outer lid closure has been reduced,
- 6. The Oxide Vessel O-ring groove has been dove-tailed to keep the O-ring in place during lid handling,
- 7. The Oxide Vessel diameters and wall thicknesses have been modified slightly to allow for the use of standard 8" oxide vessel and 10" vessel sleeve, and
- 8. The double-walled insulated design of the Oxide Vessel has been modified to an un-insulated single-walled design.

These mechanical changes were deemed significant enough to require validation of the mechanical performance of the packaging to the 1998 performance test series. Therefore, a test prototype having the modified dimensions and manufacturing practices was constructed, and drop testing was performed in March 2003. The results of these tests demonstrated that the modified OP-TU design performed the same as the original OP-TU. Evidence of these tests is provided within the revised SAR.

In order to address the mechanical changes to the design, Section 2 of the SAR has been revised. Sections 1, 3, 4, and 6 were revised to encompass the reprocessed uranium oxide payload. Sections 7 and 8 were also revised to include additional handling and maintenance procedures for the Type B payloads

Based upon the fact that each Section of SAR has been affected by these changes, CHTFE has provided the complete document with a new binder (no changed pages). Because marginal revision marks are not useful to indicate the changes made, CHTFE has also provided a listing of the changes made. This listing is provided on a page-by-page basis.

Please contact us at your earliest convenience to discuss the expected review schedule and any specific issues that NRC feels may impact the timely approval of the packaging. CHTFE is available to meet with you, in person or by phone, at any time to discuss the application. Please do not hesitate to contact us at (330) 482-6616 if you have any questions.

Sincerely,

Trevor M. Rummel
Executive Vice President

Attachment 1: Summary of Revisions for OP-TU SAR Revision 5

Attachment 2: OP-TU SAR Revision 5 (10 copies)