Nuclear Waste Partnership
An Amentum-led partnership with BWXT and Orano

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August 18, 2022

ATTN: Document Control Desk
Director, Spent Fuel Project Office
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: REVISION 26 OF THE TRUPACT-II SHIPPING PACKAGE APPLICATION, DOCKET NO. 71-9218, AND REVISION 9 OF THE HalfPACT SHIPPING PACKAGE APPLICATION, DOCKET NO. 71-9279

Dear Sir or Madam:

Nuclear Waste Partnership LLC, on behalf of the U.S. Department of Energy (DOE), hereby submits Revision 26 of the application for a Certificate of Compliance (CoC) for the TRUPACT-II Packaging, U.S. Nuclear Regulatory Commission (NRC) Docket No. 71-9218, and Revision 9 of the application for a CoC for the HalfPACT Packaging, NRC Docket No. 71-9279. This application includes revisions to the TRUPACT-II and HalfPACT Packaging Safety Analysis Report (SAR) drawings and consists of the following documents:

- TRUPACT-II SAR, Revision 26
- HalfPACT SAR, Revision 9

On June 29, 2022, a pre-shipment inspection discovered degradation of the fiberglass tube between the TRUPACT-II's Outer Containment Assembly (OCA) outboard and inboard vent port couplings (see Section H-H on Sheet 4 of TRUPACT-II SAR drawing 2077-500SNP, and Sheet 5 of HalfPACT SAR drawing 707-SAR). Subsequent inspections of other TRUPACT-II and HalfPACT packagings in the fleet have discovered an additional 14 packagings with fiberglass tubes in various stages of degradation. The reason for the tube's degradation is not known other than perhaps vent port tool interaction with the tube.

The fiberglass tube's function is to provide a passageway through the poured-in-place polyurethane foam for access to the Outer Containment Vessel (OCV) vent port. Fiberglass material was selected in lieu of metallic material to eliminate a primary heat conduction path to the OCV vent port plug that could occur during the Hypothetical Accident Condition fire event, although any non-metallic material would perform with similar success. Since the tube's only function is to provide a "dam" for the polyurethane foam during installation, the tube is categorized as a NUREG-6407 Category C that has no adverse impact on safety.

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The purpose for revising the TRUPACT-II and HalfPACT package SARs is to revise drawing 2077-500SNP and 707-SAR, respectively, to add optional materials and processes to allow for repairing or, if required, replacing the fiberglass tube, thereby ensuring free and clear access to the OCV vent port plug during normal operation.

Changes to the drawings are summarized in Attachment A and are indicated by clouds. Changes to the documents include only revision of the headers to update the revision number and date and are not redlined.

This submission contains files, one or more of which contains hyperlinks to other files or to Internet websites. These hyperlinks are either inoperable or are not essential to the use of the filing. Any material referenced by hyperlinks to Internet websites that was essential for use of this filing has been submitted as part of the filing. Any material referenced by a hyperlink to another file that was essential for the use of this filing has either been included by reference or submitted as part of this filing.

An expedited review of this application is requested. The requested need date is no later than November 22, 2022. This expedited review will allow for the flexibility to perform the repairs necessary to keep the TRUPACT-II and HalfPACT fleet in SAR compliance and continue to meet the shipment commitments that DOE has with the States relative to the reduction of the transuranic waste footprint at the generator sites.

If you have any questions regarding this submittal, please contact Mr. Daniel Staber of my staff at (575) 234-7134.

Sincerely,

Digitally signed by DANIEL STABER (Affiliate)
Date: 2022.08.18 10:56:53 -06'00'

Daniel Staber for T. E. Sellmer, Manager
Packaging and Information Systems

TES:clm

cc: C. Gadbury, CBFO
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The following table summarizes the components of this submittal. No deviations occur from the NRC-prescribed PDF formatting for the submitted files. Please contact Ms. C. L. Morrison at (505) 350-3693 or cindy.morrison@wipp.ws to resolve any discrepancies in this submittal.

File Name	File Size (MB)	Release Level	Submittal Type
001 Transmittal Letter – August 2022.pdf	0.3	Publicly Available	EIE
002 TRUPACT-II SAR R26 – August 2022.pdf	38.2	Publicly Available	EIE
003 HalfPACT SAR R9 – August 2022.pdf	43.1	Publicly Available	EIE

TRUPACT-II SAR, Revision 26, August 2022			
Section	**Page**	**Change Description**	**Justification**
General		Revised header for revision number and date.	Administrative change. No impact to safety basis.

TRUPACT-II Packaging SAR Drawing, 2077-500SNP, Revision AB, August 2022			
Sheet	**Zone**	**Change Description**	**Justification**
General		Revised header to update revision number.	Administrative change. No impact to safety basis.
1	C-5	Revise Note 33 from: "BOND FIBERGLASS TUBE TO MATIING STAINLESS PARTS USING RTV SILICONE ADHESIVE." to: "BOND NON-METALLIC TUBE TO MATING STAINLESS STEEL PARTS PRIOR TO FOAM POUR. NON-METALLIC TUBE OPTIONAL AFTER FOAM POUR. POLYMER RESIN SURFACE COATING ON FOAM IN THE OCV VENT PORT PASSAGE IS PERMITTED AFTER FOAM POUR IN LIEU OF NON-METALLIC TUBE."	Since the OCV vent port access tube's only function is to provide a passageway through the polyurethane foam during the foam pour process, the tube can be any non-metallic material to perform that function. Allowing the tube to be optional after foam pour provides operational flexibility for subsequent repairs to the OCV vent port access passage, either with a replacement tube or with a polymer resin surface coating; both will perform required function of maintaining OCV vent port access.
4	B/C-3	Revise Section H-H to remove the following: "THK X 7 LG (FIBERGLASS)"	The OCV vent port access tube's length is defined by the location of the inner and outer couplings, so a specified length is not required. The tube's material is addressed in the previous justification.

HalfPACT SAR, Revision 9, August 2022			
Section	**Page**	**Change Description**	**Justification**
General		Revised header for revision number and date.	Administrative change. No impact to safety basis.

HalfPACT Packaging SAR Drawing, 707-SAR, Revision 11, August 2022			
Sheet	**Zone**	**Change Description**	**Justification**
General		Revised header to update revision number.	Administrative change. No impact to safety basis.
1	C-5	Revise Note 33 from: "BOND FIBERGLASS TUBE TO MATIING STAINLESS PARTS USING RTV SILICONE ADHESIVE." to: "BOND NON-METALLIC TUBE TO MATING STAINLESS STEEL PARTS PRIOR TO FOAM POUR. NON-METALLIC TUBE OPTIONAL AFTER FOAM POUR. POLYMER RESIN SURFACE COATING ON FOAM IN THE OCV VENT PORT PASSAGE IS PERMITTED AFTER FOAM POUR IN LIEU OF NON-METALLIC TUBE."	Since the OCV vent port access tube's only function is to provide a passageway through the polyurethane foam during the foam pour process, the tube can be any non-metallic material to perform that function. Allowing the tube to be optional after foam pour provides operational flexibility for subsequent repairs to the OCV vent port access passage, either with a replacement tube or with a polymer resin surface coating; both will perform required function of maintaining OCV vent port access.
5	B/C-3	Revise Section H-H to remove the following: "X 7 LG (FIBERGLASS)"	The OCV vent port access tube's length is defined by the location of the inner and outer couplings, so a specified length is not required. The tube's material is addressed in the previous justification.