

**FINAL ENVIRONMENTAL ASSESSMENT  
FOR AN EXEMPTION FROM REQUIREMENT OF 10 CFR 71.61  
FOR TWO TRUPACT-III PACKAGES**

**Docket No. 71-9305  
TRUPACT-III Packaging**

**Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission**

**May 2016**

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## ABBREVIATIONS

ALARA	as low as reasonably achievable
EA	Environmental Assessment
CFR	Code of Federal Regulations
CH	contact handled
Ci	Curie
CoC	Certificate of Compliance
DOE	Department of Energy
DOT	Department of Transportation
FFCA	Federal Facility Compliance Act
ft	feet
kPa	kiloPascal
m	meter
MNOP	maximum normal operating pressure
MPa	megaPascal
MTRU	mixed transuranic
NRC	U.S. Nuclear Regulatory Commission
NWP	Nuclear Waste Partnership, LLC.
Pa	pascal
PacTec	Packaging Technology, Inc.
psi	pounds per square inch
psig	pounds per square inch gage
Pu	plutonium
RH	remote handled
SCDHEC	South Carolina Department of Health and Environmental Control
SLB2	Standard Large Box 2
SRS	Savannah River Site
TRU	Transuranic
W	Watt
WIPP	Waste Isolation Pilot Plant

## 1. INTRODUCTION

On January 28, 2014, Nuclear Waste Partnership, LLC. (NWP) submitted a request to the U.S. Nuclear Regulatory Commission (NRC) for an exemption, in accordance with Title 10 of the Code of Federal Regulations (10 CFR) 71.12, for the one-time transport of two Model No. TRUPACT-III packages in two separate truck shipments. Specifically, NWP requested an exemption from the requirements in 10 CFR 71.61, "Special requirements for Type B packages containing more than  $10^5 A_2$ " (i.e., "deep water immersion test"). (NWP 2014). NWP supplemented its request with additional information and updates (NWP 2015a, b, c, 2016a, b).

Along with the exemption request, NWP also requested approval from the NRC for an increase in (1) the  $A_2^1$  limit from less than  $10^5 A_2$  to  $2.1 \times 10^5 A_2$  and (2) the authorized decay heat limit from 80 Watts (W) to 190 W (NWP 2016b). The  $A_2$  and decay heat limits are established in the TRUPACT-III Certificate of Compliance No. 9305, Revision No. 9 (CoC) (NRC 2015a).

The NRC staff performs both a safety evaluation and an environmental review. The NRC staff will prepare a separate safety evaluation report to document its review and analysis. The NRC's safety review evaluates NWP's assessment of the impacts of not performing the deep water immersion test as well as the proposed increases in  $A_2$  quantities and heat loads in the two Standard Large Box 2 (SLB2s) to be shipped in the TRUPACT-III package to determine whether the NRC can approve the increases.

The environmental review is documented in this Environmental Assessment (EA), which has been developed by the NRC staff in accordance with the requirements of 10 CFR 51.21 and 51.30(a). Additionally, development of this EA was coordinated with the development of the safety evaluation report. This EA defines the NRC's proposed action (Section 2) and the purpose and need for the proposed action (Section 3). Evaluations of the potential environmental impacts of the proposed action (Section 4) and alternatives to the proposed action (Section 5) are then presented, followed by the NRC's conclusion. Alternatives to the proposed action that are considered in this EA are: the no-action alternative (i.e., not granting the exemption); further segmenting the waste; using a different type of package; and storing the waste until the activity decays below  $10^5 A_2$ .

The NRC's decision whether to grant the exemption, including approval of the increases as proposed, will be based on the results of the NRC staff's review as documented in this EA and in the safety evaluation report.

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<sup>1</sup> The regulations in Title 10 use the  $A_1$  and  $A_2$  values as points of reference for quantity limits for radionuclides. Each radionuclide is assigned an  $A_1$  and an  $A_2$  value. These two values (in Becquerel or curies) are the maximum activity of that radionuclide that may be transported in a Type A package. The  $A_2$  value is the limit for the amount of activity that can be transported in a Type A package if the material is in normal form. The  $A_1$  and  $A_2$  values are used in the regulations as a normalized measurement of radiological risk for all radionuclides. (DOT 1998)

## 1.1 Background

The TRUPACT-III is a shipping container used to transport transuranic (TRU) waste within a Standard Large Box 2 (SLB2) waste box. The TRUPACT-III packages are rectangular with inner and outer stainless steel plates and polyurethane foam for protection during the tests for hypothetical accident conditions in 10 CFR 71.73 and in the event of an accident during transport. The TRUPACT-III waste packages are front loaded in a horizontal position on custom-designed trailers for truck transport. (DOE 2015). The two TRUPACT-III packages will be transported by truck, in two shipments, from Savannah River Site (SRS) in South Carolina, to the U.S. Department of Energy (DOE) Waste Isolation Pilot Plant (WIPP) outside Carlsbad, New Mexico (NWP 2014).

TRU waste is material contaminated with transuranic elements—artificially made, radioactive elements, such as neptunium, plutonium, americium, and others—that have atomic numbers higher than uranium (92) in the periodic table of elements. TRU waste is either RH – remote handled or CH – contact handled, determined by the radiation dose rate at the surface of the waste container. The TRU waste being considered for these two shipments is CH-TRU waste (NWP 2015a).

The TRU waste is being removed from SRS as a part of the facility's Approved Site Treatment Plan (Plan), in conjunction with SRS's TRU waste legacy program (NWP 2015a). The Plan states, "The current DOE strategy for management of mixed transuranic (MTRU) wastes is to...permanently dispose of applicable MTRU in WIPP." (Westinghouse 1996). SRS is required to have a plan by the Federal Facility Compliance Act (FFCA) and South Carolina Department of Health and Environmental Control's Consent Order 95-22-HW (Consent Order) (SCDHEC 1995). The FFCA and Consent Order require DOE to develop schedules for mixed waste treatment (which includes TRU waste) to meet land disposal restriction requirements. Further, the American Recovery and Reinvestment Act provided funds to accelerate the completion of SRS's legacy waste program.

The contents of each SLB2 is primarily one half of a decommissioned tank that was used to process Plutonium 238 (Pu-238), plastic bags, wood, and miscellaneous metal parts (NWP 2014). As a result, approximately 99 percent of the activity of these packages is due to Pu-238. For purposes of calculating the content's  $A_2$  value, NWP assumed all activity in the SLB2 waste boxes is coming from Pu-238 ( $A_2$  value of 0.027Ci). The two SLB2s have calculated  $A_2$  values of  $2.1 \times 10^5 A_2$  and  $1.6 \times 10^5 A_2$  (NWP 2014). The SLB2 waste boxes have not been loaded into the TRUPACT-III packages yet and are currently sitting on a storage pad at SRS (NWP 2015a).

## **1.2 Scope of Additional Request**

In addition to the exemption request from 10 CFR 71.61, NWP requested approval from the NRC for an increase in the  $A_2$  limit and the authorized decay heat limit as established in the TRUPACT-III CoC (NWP 2014, 2016) for the two subject packages.

Approval for the increase in the  $A_2$  limit and the authorized decay heat limit above that established in the TRUPACT-III CoC will be based on the NRC staff's review of the safety evaluation included in the application for the increased limits. A brief, high-level summary of NWP's safety evaluation is discussed below.

The following sections explain why the environmental impacts of the higher decay heat and  $A_2$  quantities are bounded by previous NRC environmental reviews and therefore, are not considered further in this EA.

### **1.2.1 Decay Heat Limits**

The two SLB2s have maximum heat loads that exceed the 80-W package design limits in the TRUPACT-III CoC. In its application, NWP evaluated an SLB2 with a heat load of 190 W, which bounds the actual heat loads of both packages (187.3 W and 142.0 W). That analysis evaluated the heat test for normal conditions of transport and the transient fire test for hypothetical accident conditions with the increased decay heat. Even with higher decay heat limits, all of the temperatures for the containment system and structural components of the packaging remain below their maximum allowable temperature limits for both normal conditions of transport and hypothetical accident conditions. The maximum normal operating pressure (MNOP) of 25 pounds per square inch gage (psig) (172 kiloPascals (kPa) gauge) is limited in Condition 10 of the TRUPACT-III CoC. The pressure developed in the package includes the initial quantity of gas in the containment boundary, the quantity of gas generated by radiolysis of the contents and dunnage in the SLB2, and of water vapor. Via Condition No. 10 in the TRUPACT-III CoC, the shipper is required to control gas generated in the payload and released into the cavity within the TRUPACT-III so that the pressure remains below 25 psig.

NWP performed a calculation of the maximum cavity pressure for the hypothetical accident conditions fire test and concluded a peak pressure of 248 kPa gauge, which is less than the predicted value in the TRUPACT-III Safety Analysis Report (AREVA 2013). The NRC staff reviewed NWP's thermal and pressure calculations and concluded that the package material and component temperatures will not exceed the specified allowable limits for both normal conditions of transport and hypothetical accident conditions, and that pressures will remain below those already evaluated and approved in the CoC. Thus the increased decay heat load will not impact the ability of the package to meet the requirements in 10 CFR Part 71.

In NUREG-0170, "Final Environmental Statement on the Transportation of Radioactive Material in Air and Other Modes," (NRC 1977), prepared, in part, to assist Commission review in the development of regulations dealing with transportation of radioactive materials in 10 CFR Part 71, the NRC assessed the adequacy of the transportation regulations to provide safety assurance. In that assessment, the measure of safety was the risk of radiation doses to the public under routine and accident transport conditions, and the risk under the effective regulations was found to be sufficiently small to allow continued shipments by all modes. Because transport of the two high heat-load SLB2 waste boxes does not cause a significant impact to the thermal performance after evaluation of the tests for both normal conditions of transport, consistent with the tests specified in 10 CFR 71.71, and hypothetical accident conditions, consistent with the tests specified in 10 CFR 71.73, the environmental impacts from the requested heat load levels are bounded by the environmental analysis documented in NUREG-0170 (NRC 1977).

### **1.2.2 Increase in A<sub>2</sub> Limit**

The two SLB2s have A<sub>2</sub> quantities of  $2.1 \times 10^5$  A<sub>2</sub> and  $1.6 \times 10^5$  A<sub>2</sub>, which although not explicitly mentioned in the TRUPACT-III CoC, exceeds the  $10^5$  A<sub>2</sub> quantity in 10 CFR 71.61 requiring deep water immersion testing. The headspace flammable gas measurements for both SLB2 waste boxes correspond to innermost containment hydrogen concentrations that are well below the 5 percent hydrogen concentration limit specified in Condition No. 8 in the TRUPACT-III CoC. NWP stated in the exemption request that compliance with the flammable gas generation rate limit, independent of heat load, will ensure compliance with the total gas generation rate. NWP stated that the heat load, although increased, is largely from the contamination of the inner wall of the recovery transfer tank, and is comprised of inorganic material, which does not generate gas by the radiolysis. The staff reviewed NWP's evaluations and concludes that the headspace flammable gas measurement results for both SLB2 boxes are well below the 5 percent hydrogen concentration limit identified in the CoC and NUREG-1609, "Standard Review Plan for Transportation Packages for Radioactive Material" (NRC 1999). Therefore, both SLB2 waste boxes meet the requirements in 10 CFR 71.43(d) that a package be made of material that assures that there will be "no significant chemical, galvanic, or other reaction among the packaging components, among package contents, or between the packaging components and the package contents." Because the headspace flammable gas measurements results for both SLB2 waste boxes, and consequently the TRUPACT-III packages containing the SLB2s, meet the requirements in 10 CFR 71.43(d), the environmental impacts from the requested A<sub>2</sub> quantities are bounded by the environmental analysis documented in NUREG-0170 (NRC 1977).

## **2. PROPOSED ACTION**

The proposed action is for the NRC to grant an exemption to NWP from the deep water immersion test in 10 CFR 71.61 for the two subject TRUPACT-III packages. The deep water immersion test was established in the International Atomic Energy Agency's international standards for intercontinental transport to address retrievability of packages expected to be transported by ship over water deeper than 200 meters (m) (656 feet [ft]). To be compatible with the international standards, the NRC added the regulation for the deep water immersion tests in 2004 (see 69 FR 3698).

## **3. PURPOSE AND NEED FOR THE PROPOSED ACTION**

The purpose of the proposed action is to allow the one-time transport of two TRUPACT-III packages, in separate truck shipments. A TRUPACT-III package containing more than  $10^5 A_2$  has not been evaluated for the deep water immersion test, i.e., that the package's undamaged containment system can withstand an external water pressure of 2 MegaPascal for a period of not less than 1 hour without collapse, buckling, or inleakage of water. The requirement to comply with the deep water immersion test is triggered for these two packages because the proposed contents exceed the  $10^5 A_2$  limit. Currently, the only transportation package large enough to hold SLB2 waste boxes is the TRUPACT-III.

## **4. ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION**

This EA evaluates the potential environmental impacts of granting the exemption of the two subject TRUPACT-III packages from the deep water immersion test. The potential impacts from granting the exemption would only be radiological, as discussed below, since they would only be realized in an accident scenario. Any nonradiological impacts (direct, indirect, or cumulative) would be no greater than those for the transport of any other TRUPACT-III package and are therefore bounded by the environmental analysis documented in NUREG-0170.

The TRUPACT-III CoC authorizes "... contact-handled transuranic (CH-TRU) waste and other authorized payloads that do not exceed  $10^5 A_2$  quantities." (NRC 2015a). NWP requested exemption from the deep water immersion test for a package containing more than  $10^5 A_2$ . The requirements in 10 CFR 71.61 require that "A Type B package containing more than  $10^5 A_2$  must be designed so that its undamaged containment system can withstand an external water pressure of 2 MPa (290 psi) for a period of not less than 1 hour without collapse, buckling, or inleakage of water."

The purpose of the deep water immersion test in 10 CFR 71.61 is to ensure package recoverability, since radioactive materials such as plutonium and high-level radioactive waste are increasingly being transported by sea in large quantities. The deep water immersion test external pressure of 2 MPa (290 psi) is equivalent to being submerged in 200-meter (660-ft) water depth and roughly corresponds to the continental shelf and to depths that the studies indicated radiological impacts could be important. (69 FR 3698).

The TRUPACT-III shipment proposed by NWP will take place via truck from SRS in South Carolina (SC) to WIPP in New Mexico (NM). During transport, the two trucks will cross several bodies of water by bridge. According to NWP, the Mississippi River, which is crossed in Vicksburg, Mississippi would be the deepest body of water encountered, with a depth of 14 m (46 ft) (NWP 2014). During extreme flood stages, the proposed route does cross three rivers that may exceed 15 m (50 ft) depth (NWP 2015a). Weather conditions are checked prior to commencement of transport and if a weather event or an unplanned event (e.g., road construction) occurs during transport, travel may be stopped and alternate arrangements made (NWP 2015a).

DOE has established preferred routes in 49 CFR Part 397 Subpart D for radioactive material transporters. These regulations provide routing requirements to use routes that would minimize potential radiological impacts (DOE 1997). There are mitigation measures and monitoring that SRS and WIPP have in place for the transport of TRU waste. For example, the SRS characterizes the TRU waste in accordance with the WIPP Waste Acceptance Criteria and ships the waste along approved routes. WIPP has emergency responders to handle off-site emergencies. The two packages will also be tracked via satellite along the entire route through TRANSCOM<sup>2</sup>. (NWP 2015a)

In its application for a CoC, Packaging Technology, Inc. (PacTec) evaluated the TRUPACT-III package for immersion in 15 m (50 ft) of water, as required by 10 CFR 71.73(c)(6) (AREVA 2007). PacTec evaluated the package by determining the effects of applying a 150 kPa gauge pressure to the outside of the containment structural assembly. In 2013, AREVA, the certificate holder for the TRUPACT-III package, submitted a consolidated application for CoC No. 9305, which contains the analysis originally submitted by PacTec. In the consolidated application, the factor of safety against buckling for the 50-foot immersion test is 4.41 for the containment structural assembly (AREVA 2013), therefore the containment system will not be damaged and will remain intact, thus there will be no release of radioactive material from this immersion test.

In summary, there would be no radiological impacts as a result of exempting these two packages from the deep water immersion test since the packages will not cross bodies of water with depths greater than 15 m (50 ft). Therefore, the environmental impacts of transporting these two TRUPACT-III packages from SRS to WIPP are still bounded by those in NUREG-0170 (NRC 1977).

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<sup>2</sup> "TRANSCOM is a GPS satellite location tracking system used to document the exact position of the conveyance in real time." (NWP 2015a). DOE developed TRANSCOM and it has been in operation since 1989 and its use is mandated in DOE Order 460.2 (DOE 1997).

## **5. ALTERNATIVES TO THE PROPOSED ACTION**

The following alternatives to the proposed action were considered: the no-action alternative (i.e., not granting the requested exemption); further segmenting the waste to meet TRUPACT-III design limits; using a different package; and storing the waste until the activity decays below  $10^5 A_2$ . These alternatives have been eliminated from further consideration in this EA for reasons discussed below.

### **5.1 No-Action Alternative**

Under the no-action alternative, the NRC would not grant NWP's exemption request and, as a result, the TRU waste would remain at SRS indefinitely. If the waste were to remain at SRS, there would be no additional public or worker exposure to the waste than what is currently realized at SRS, and there would be no impacts associated with its transport to WIPP. However, the removal of TRU waste from SRS is part of the facility's Plan (Westinghouse 1996) which states that all TRU waste will be shipped to WIPP for disposal. Currently, SRS is not authorized to permanently store TRU waste at its site (NWP 2015a). Therefore, the no-action alternative is not considered further because it does not meet the purpose and need for the proposed action.

### **5.2 Further Segmenting the Waste to Meet $A_2$ Limits**

Under this alternative, the decommissioned tank would be further segmented and placed in additional waste boxes to reduce the number of  $A_2$ s in each package, thus eliminating the need to comply with the deep water immersion test. As a result of the additional effort to segment the waste, potential radiological impacts to workers (occupational dose) from segmenting, handling, and packaging the waste at the SRS would be greater than those for the proposed action which would not require further handling or segmenting. In addition, SRS currently does not have the necessary facilities to further segment the tank in a way that would meet the principles of As Low As is Reasonably Achievable (ALARA)<sup>3</sup> (NWP 2015a). If new facilities were to be built then there could be impacts to land use, soils, noise, historic and cultural resources, ecological resources, and water resources due to land disturbance and construction of the new facilities. Overall, this alternative would result in higher occupational doses for the involved workers and potential impacts to several resource areas if a new waste handling facility had to be built.

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<sup>3</sup> As defined in Title 10, Section 20.1003, of the *Code of Federal Regulations* (10 CFR 20.1003), ALARA is an acronym for "as low as (is) reasonably achievable," which means making every reasonable effort to maintain exposures to ionizing radiation as far below the dose limits as practical, consistent with the purpose for which the licensed activity is undertaken, taking into account the state of technology, the economics of improvements in relation to state of technology, the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations, and in relation to utilization of nuclear energy and licensed materials in the public interest.

### **5.3 Using a Different Package**

This alternative includes two options – removing the TRU waste currently in the SLB2s and using packaging that meets the deep water immersion test criteria or using a different transportation package to carry the SLB2s.

For the first option of removing the TRU waste and placing it into a package that meets the deep water immersion test criteria, NWP determined that there were no Type B packages that were of sufficient size to carry the contents as they currently exist. The Model Nos. TRUPACT-II, 8-120B, 10-160B, and RT-100 are too small (i.e., too short) (NWP 2015a). Also, as mentioned in the previous alternative, further segmenting the waste would be inconsistent with ALARA principles.

In the second option, a different transportation package would be used to transport the SLB2s. However, there are no currently-available NRC-certified transportation packages of the necessary size suitable for shipment by truck. There are potential spent fuel packages with adequate size, but these are typically transported by rail, and WIPP does not have rail service. (NWP 2015a).

Therefore, because there are no packages currently available that are of sufficient size and because WIPP has no rail service, neither option under this alternative meets the purpose and need of the proposed action and thus are not considered further.

### **5.4 Storing the Waste at SRS until the Activity Decays Below $10^5 A_2$ Limit**

Under this alternative, the TRU waste would be stored at SRS to allow for enough radioactive decay such that the packages would be below  $10^5 A_2$  and thus not be required to meet the deep water immersion test. However, due to the long half-life of Pu-238, 87 years, it would take almost 100 years to decay enough to meet the  $A_2$  limit. Long term storage of TRU waste at SRS is not part of the SRS's Plan (NWP 2015a). As a result, this alternative is eliminated from further consideration since it does not meet the purpose and need of this proposed action.

### **5.5 Summary**

None of the alternatives are preferable to the proposed action because either the impacts are greater than the proposed action or they do not meet the purpose and need of the proposed action. Therefore, the proposed action is the preferred alternative.

## **6. AGENCIES CONTACTED**

The NRC provided the States of SC and NM a draft copy of this EA for review (NRC 2016a, 2016b). The NRC did not receive any comments (NMENV 2016; SCDHEC 2016).

The NRC staff has determined that the exemption from the deep water immersion test for the two subject packages would have no impact on ecological resources or historic and cultural resources and, therefore, no consultations are necessary under Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act, respectively.

## **7. CONCLUSION**

The environmental impacts of the proposed action – an exemption from the deep water immersion test for the one-time transport of two TRUPACT-III packages from SRS to WIPP in two separate shipments – have been reviewed under the requirements in 10 CFR Part 51. In this EA, NRC has determined that exempting the TRUPACT-III packages from the deep water immersion test will have environmental impacts no greater than those described in NUREG-0170 since the packages are not expected to travel over water of depth greater than 15 m (50 ft). The NRC concludes that this exemption will not have a significant effect on the human environment. Accordingly, NRC has determined that a Finding of No Significant Impact (FONSI) is appropriate and an EIS is not warranted. The NRC will publish the FONSI in the *Federal Register*.

## 8. REFERENCES

The documents referenced in this EA are all publically available. The references are available for public inspection and copying at NRC's Public Document Room, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852. Documents available through the NRC's electronic reading room (ADAMS) at <http://www.nrc.gov/reading-rm/adams.html> have an Accession No. provided.

- 10 CFR Part 20. *Code of Federal Regulations*, Title 10, *Energy*, Part 20, "Standards for Protection Against Radiation." Washington, D.C.
- 10 CFR Part 51. *Code of Federal Regulations*, Title 10, *Energy*, Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions." Washington, D.C.
- 10 CFR Part 71. *Code of Federal Regulations*, Title 10, *Energy*, Part 71, "Packaging and Transportation of Radioactive Materials." Washington, D.C.
- 49 CFR Part 397. *Code of Federal Regulations*, Title 49, *Transportation*, Part 397, "Transportation of Hazardous Materials: Driving and Parking Rules." Washington, D.C.
- 69 FR 3698. *Compatibility with IAEA Transportation Safety Standards (TS-R-1) and Other Transportation Safety Amendments. Federal Register* Volume 69, Issue 16. January 26, 2004.
- American Recovery and Reinvestment Act of 2009.
- AREVA 2007. TRUPACT-III Safety Analysis Report, Revision 0. June 2007. ADAMS Accession No. ML16049A539.
- AREVA 2013. TRUPACT-III Safety Analysis Report, Revision 15. July 2013. ADAMS Accession No. ML13273A612.
- DOE 1997. *Waste Isolation Pilot Plant Disposal Phase Final Supplemental Environmental Impact Statement*. (SEIS-II) DOE/EIS-0026-S2. September 1997. Available at: <http://energy.gov/sites/prod/files/EIS-0026-S2-FEIS-v01-1997.pdf>
- DOE 2015. TRUPACT-III Quick Facts. Available at <http://energy.gov/sites/prod/files/WIPP%20TRUPACT-III%20Quick%20Facts.pdf>. Accessed on September 11, 2015.
- DOT 1998. *Radioactive Material Regulations Review*. RAMREG-001-98. Available at: <https://www.orau.org/ptp/PTP%20Library/library/DOT/miscellaneous/ramreview.pdf>.
- Endangered Species Act of 1973, as amended. 16 USC §1531 et seq.
- Federal Facility Compliance Act (FFCA). Public Law 102-386. October 6, 1992.
- National Historic Preservation Act of 1966. 16 USC §470 et seq.
- NMENV 2016. Email from Mr. Tongate, NMENV, to NRC, dated April 18, 2016, regarding "Courtesy Copy of NRC letter requesting comments on draft environmental assessment." Accession No. ML16134A603.

- NRC 1977. NUREG-0170, *Final Environmental Statement on the Transportation of Radioactive Material By Air and Other Modes*. Docket No. PR-71, 73 (40 FR 23768). December 1977. ADAMS Accession No. ML12192A283.
- NRC 1999. NUREG-1609, *Standard Review Plan for Transportation Packages for Radioactive Material. Initial Report*. Accessible at: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1609/final/index.html>.
- NRC 2014. Letter from B.H. White, NRC, to T.E. Sellmer, NWP, regarding Application for Exemption for the Model No. TRUPACT-III – Supplemental Information Needed. Dated May 20, 2014. Accession No. ML14140A204.
- NRC 2015a. Letter from Mark Lombard, NRC, to Philip Noss, AREVA Federal Services, LLC, regarding, “REVISION NO. 9 OF CERTIFICATE OF COMPLIANCE NO. 9305 FOR THE MODEL NO. TRUPACT-III TRANSPORTATION PACKAGE.” Dated July 21, 2015. Package Accession No. ML15201A571.
- NRC 2016a. Letter from NRC, to Susan Jenkins, S.C. Department of Health and Environmental Control, dated April 14, 2016, regarding “Request for Comment: Draft Environmental Assessment for the Nuclear Waste Partnership, LLC’s Request for Exemption from Title 10 of the *Code of Federal Regulations* Part 71.61 for the One-Time Shipment of Two TRUPACT-III Packages.” Accession No. ML16032A178.
- NRC 2016b. Letter from NRC, to Butch Tongate, New Mexico State Environment Department, dated April 14, 2016, regarding “Request for Comment: Draft Environmental Assessment for the Nuclear Waste Partnership, LLC’s Request for Exemption from Title 10 of the *Code of Federal Regulations* Part 71.61 for the One-Time Shipment of Two TRUPACT-III Packages.” Accession No. ML16032A175.
- NWP 2014. Letter from Nuclear Waste Partnership LLC to NRC regarding “TRUPACT-III Docket No. 71-9305, Exemption Request per 10 CFR 71.12 for Transport of Standard Large Box 2 Waste Boxes with Wattage and A<sub>2</sub> Activity Exceeding Certificate Limits.” January 28, 2014. Accession No. ML14035A106.
- NWP 2015a. Letter from Nuclear Waste Partnership LLC to NRC, regarding “REQUEST FOR ADDITIONAL INFORMATION RELATED TO THE TRUPACT-III APPLICATION FOR EXEMPTION.” March 10, 2015. Accession No. ML15071A022.
- NWP 2015b. Letter from Mr. P. Noss, AREVA, to Mr. T. Sellmer, NWP, regarding “Responses to NRC RAI on the TRUPACT-III Environmental Report.” August 10, 2015. Accession No. ML15254A328.
- NWP 2015c. Letter from NWP to the NRC, regarding “Responses to Request for Additional Information Related to the TRUPACT-III Application for Exemption.” September 16, 2015. Accession No. ML15280A350.
- NWP 2016a. Letter from Nuclear Waste Partnership LLC to NRC, regarding “TRUPACT-III Docket No. 71-9305, Withdrawal of Exemption Request per 10 CFR 71.12 for Transport of Standard Large Box 2 Waste Boxes with Wattage and A<sub>2</sub> Activity Exceeding Certificate Limits.” March 14, 2016. Accession No. ML16077A013.
- NWP 2016b. Letter from Nuclear Waste Partnership LLC to NRC, regarding “TRUPACT-III Docket No. 71-9305, Withdrawal of Exemption Request per 10 CFR 71.12 for Transport

of Standard Large Box 2 Waste Boxes with Wattage and A2 Activity Exceeding Certificate Limits.” April 1, 2016. Accession No. ML16096A355.

SCDHEC 1995. Consent Order 95-22-HW. October 5, 1995. Available at:  
[http://energy.gov/sites/prod/files/em/2001\\_Agreements/SRS\\_CO\\_95-22-HW\\_9-29-95.pdf](http://energy.gov/sites/prod/files/em/2001_Agreements/SRS_CO_95-22-HW_9-29-95.pdf)

SCDHEC 2016. Email from Ms. Jenkins, SCDHEC, to NRC, dated May 20, 2016, regarding “Courtesy Copy of NRC letter requesting comments on draft environmental assessment.” Accession No. ML16144A079.

Westinghouse 1996. *Savannah River Site Mixed Waste Approved Site Treatment Plan, Rev 4*. April 15, 1996. WSRC-TR-94-0608. Available at  
<http://digital.library.unt.edu/ark:/67531/metadc671204/m1/288/?q=transuranic>.