



EM Environmental Management

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DOE Packaging Certification Program

**Safety Evaluation Report for
Certificate of Compliance No. 9168 Letter of Authorization
Extension for the Model 8-120B Package**

Docket No. 24-28-9168

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This Safety Evaluation Report (SER) documents the U.S. Department of Energy (DOE) Packaging Certification Program (PCP) independent review of the request submitted for the DOE Idaho Operations Office (ID) by the package Certificate Holder, EnergySolutions (ES), to extend the Letter of Authorization (LoA) issued September 7, 2022, to authorize use of the Model 8-120B for shipments of two DOE legacy plutonium JE-899 V3XA spheres from the Nevada National Security Site (NNSS) to the Idaho National Laboratory (INL) for processing.

Evaluation

By letter dated April 24, 2024, the certificate holder, ES requested an extension to the LoA to CoC No. 9168, Revision 4, for the Model No. Model 8-120B package design that was issued on September 7, 2022, with its SER, to authorize use of the package for shipment of two JE-899 V3XA (V3XA spheres), one sphere per package, from NNSS to INL for processing.

The current LoA expires July 31, 2024. However, due to NNSS and INL facility operations beyond the control of ES, ES requested an extension to the LoA that coincides with the expiration date of the CoC (August 31, 2027), which should be sufficient time for NNSS and INL to complete shipments.

Based on the statements and representations in the ES request, and with the conditions listed below, DOE PCP staff has reasonable assurance that the regulatory requirements of 10 CFR Part 71 have been met and recommends extension of the LoA to CoC 9168 by the DOE Headquarters Certifying Official (HCO).

Conditions of Approval

The following conditions are required in the LoA to amend the CoC per this SER.

1. In addition to the requirements of Subparts G and H of 10 CFR Part 71:
 - a. The package must be prepared for shipment and operated in accordance with the Operating Procedures of Chapter 7 of the *Safety Analysis Report for Model 8-120 Shipping Package (SARP), Consolidated Revision 11*, as supplemented by *JE-899 Type V3XA Spheres Shipping Addendum for Model 8-120B Type B Shipping Package*, ATKINS/ES 20-001, Rev.1, April 2022.
 - b. The packaging must be tested and maintained in accordance with acceptance tests and maintenance program described in the Acceptance Tests and Maintenance Program of Chapter 8 of the SARP, as supplemented by ATKINS/ES 20-001, Rev.1. The shipper must verify the V3XA sphere is vented prior to loading in the package.
2. The lifting eye must be removed from the sphere prior to package closure for transport.
3. Safe shipping period is 119 days – shipping period begins when the 8-120B package is closed.
4. All other conditions of the certificate 9168 Rev. 4 remain unchanged.
5. This authorization shall expire on August 31, 2027.