

Department 1200 New Jersey Avenue, SE Washington, DC 20590

Pipeline and Hazardous Materials Safety Administration

DOT-SP 16624 (FOURTH REVISION)

EXPIRATION DATE: 2025-12-31

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. <u>GRANTEE</u>: Framatome Inc.

Richland, WA

2. PURPOSE AND LIMITATION:

- a. This special permit authorizes the transportation in commerce of helium, compressed, in non-DOT specification pressure containers described as non-Uranium bearing rods and assemblies. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
- b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
- c. No party status will be granted to this special permit.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
- 4. <u>REGULATIONS FROM WHICH EXEMPTED</u>: 49 CFR §§ 173.301(a)(1) and 173.302(a)(1) in that non-DOT specification packaging is not authorized, except as provided herein.
- 5. <u>BASIS</u>: This special permit is based on the application of Framatome Inc. dated December 7, 2021, submitted in accordance with § 107.109.

6. <u>HAZARDOUS MATERIALS (49 CFR 172.101)</u>:

Hazardous Materials Description			
Proper shipping name	Hazard Class/ Division	Identi- fication Number	Packing Group
Helium, compressed	2.2	UN1046	N/A

7. SAFETY CONTROL MEASURES:

- a. <u>PACKAGING</u>: Packagings prescribed are non-DOT specification pressure containers described as non-Uranium bearing rods and assemblies. The non-Uranium bearing rods and assemblies are described as Control Component Rods, Control Component Assemblies, Inert Fuel Rods, and Inert Fuel Assemblies. The rods are constructed of seamless tubing with welded end caps and are not equipped with pressure relief devices. The rods and assemblies are designed and manufactured in accordance with Nuclear Regulatory Commission (NRC) Approved Topical Reports, Quality Programs, and/or ASME Code, Section III as described in the application for special permit on file with the Office of Hazardous Materials Safety. The designs include:
 - (1) **CE14 Control Element Assembly (CEA) and CE16 CEA** fabricated from Alloy 625 with a minimum wall thickness of 0.036 inch and 0.032 inch, respectively, and a charge pressure no greater than 300 psig.
 - (2) **Non-Uranium bearing fuel rods, PWR** (Pressurized Water Reactor) fabricated from Zirconium Alloy cladding with a minimum wall thickness of 0.021 inch and a maximum charge pressure of 450 psig.
 - (3) **Non-Uranium bearing fuel rods BWR** (Boiling Water Reactor) fabricated from Zircaloy-2 cladding with a minimum wall thickness of 0.020 inch and a maximum charge pressure of 450 psig.
 - (4) **Extended Life Control Rod Assembly (ELCRA)** fabricated from Alloy 625 with a minimum wall thickness of 0.0215 inch and a charge pressure no greater than 480 psig.

b. TESTING:

- (1) Each completed rod must be helium leak tested. The leak test requirement must be at least equivalent to the "leaktight" definition within ANSI N14.5-2014. Rods that fail the leak test requirements must be rejected.
- (2) No periodic requalification in accordance with 49 CFR Part 180 is required.

c. <u>OPERATIONAL CONTROLS</u>: Each rod(s) or assembly of rods must be transported in a strong outside container.

8. SPECIAL PROVISIONS:

- a. Under the terms of this special permit, the grantee may only offer hazardous materials (i.e., the grantee is not authorized as a carrier).
- b. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modification or change is made to the package and it is reoffered for transportation in conformance with this special permit and the HMR.
- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- d. MARKING: The outside of each package must be marked "DOT-SP 16624".
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.
- 10. <u>MODAL REQUIREMENTS</u>: A current copy of this special permit must be carried aboard each motor vehicle used to transport packages covered by this special permit.
- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
 - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- "The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005),

amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. <u>REPORTING REQUIREMENTS</u>: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for William Schoonover

Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-13, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at https://www.phmsa.dot.gov/approvals-and-permits/hazmat/special-permits-search. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: CHENG/NICKS