

U.S. Department of Transportation

Research and Special Programs Administration 400 Seventh Street, S.W. Washington, D.C. 20590

DOT-E-12115

EXPIRATION DATE: October 31, 1999

(FOR RENEWAL, SEE 49 CFR SECTION 107.109)

1. <u>GRANTEE</u>: GPU Nuclear, Inc. Middletown, PA

2. PURPOSE AND LIMITATION:

- a. This exemption authorizes the one time transportation in commerce of a reactor vessel from the GPU Nuclear's Saxton Nuclear Experimental Corporation facility in Saxton, PA to the Chem-Nuclear Systems, Inc. (CNSI) Waste Management Facility located in Barnwell, SC. This exemption authorizes the reactor vessel to be classified as low specific activity material, class III, and transported as a non-specification package under a transport plan which provides an equivalent level of safety to the packages and procedures specified in Title 49 of the Code of Federal Regulations. This exemption provides no relief from any regulation other than as specifically stated herein.
- b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
- 4. REGULATIONS FROM WHICH EXEMPTED:
 - a. The definition of low specific activity material, class III, found in 49 CFR Part 173.403 in that it does not specifically address presence or mixtures of activated metals and surface contaminated articles.
 - b. The packaging requirements for LSA-III material found in 49 CFR 173.427(a) in that the use of non-specification packaging (the reactor vessel) is authorized for the transport of low specific activity, class III, material.
 - c. The dose rate requirement of less than 10 mSv/hr at 3 meters found in 49 CFR 173.427(a)(1) in that the internals are fixed in place and the vessel is filled with low density

concrete so that individual assessment is not required.

- d. The leach test requirement for low specific activity, class III, material found in 49 CFR 173.468 in that the internal components and internal surfaces will not be exposed to water.
- 5. <u>BASIS</u>: This exemption is based on the application of GPU Nuclear dated June 24, 1998 and the additional data submitted on October 12, 1998. All documents were submitted in accordance with 49 CFR 107.105 and the public proceeding thereon.
- 6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous materials description proper shipping name	Hazard Class/ Division	Identi- fication Number	Packing Group
Radioactive material, low specific activity material, n.o.s.	Class 7	UN 2912	N/A

7. PACKAGING AND SAFETY CONTROL MEASURES:

a. PACKAGING -

- 1. Under the provisions of this exemption, the reactor vessel is considered to be a non-specification package providing an equivalent level of safety to the packaging authorized under Title 49 of the Code of Federal Regulation.
- 2. The activity levels, contamination levels and radionuclides present on and within the reactor vessel shall be consistent with the levels identified in GPU Nuclear's application.
- 3. To maximize radiation protection, the reactor vessel will be prepared for shipment by filling the vessel with low density concrete and by welding or bolting shut all nozzles, instrument penetrations and mechanical enclosures using closure plates. After these preparations have been completed, the outer shell of the reactor vessel shall be painted.
- 4. All lifting mechanisms will be removed or rendered inoperable.

b. OPERATIONAL CONTROLS -

- a. The reactor vessel will shipped by dedicated, sole use train and will be consigned as exclusive use.
- b. All controls, provisions and routes specified in GPU Nuclear Transportation Plan and Emergency Response Plan which was submitted as part of the exemption application and amended on October 12, 1998 shall be followed.
- c. MARKING The package shall be plainly and durably marked "DOT-E-12115" in accordance with 49 CFR 172.301(c). In accordance with 49 CFR 173.427(a)(6), the package shall must be marked "Radioactive LSA" and, if appropriate, package must also be stenciled with the letters "RO".

8. SPECIAL PROVISIONS:

- a. Shippers using the packaging covered by this exemption must comply with all provisions of this exemption, and all other applicable requirements contained in 49 CFR Parts 171-180.
- b. The reactor vessel shall be marked, labeled, and placarded in accordance with the provisions identified in 49 CFR 173.427(a).
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and rail freight.

10. MODAL REQUIREMENTS:

A copy of this exemption must be carried aboard each motor vehicle used to transport packages covered by this exemption.

11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. Section 5101 <u>et seq</u>:

- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Registration required by 49 CFR 107.601 <u>et seq.</u>, when applicable.

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

Each "Hazmat employee", as defined in 49 CFR 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by 49 CFR 172.700 through 172.704.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (49 CFR 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incidents involving the package and shipments made under the terms of this exemption.

Issued at Washington, D.C.:

Alan I. Roberts

Associate Administrator

for Hazardous Materials Safety

OCT 3 0 1998

(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

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