JUL 28 1998

U.S. Department of Transportation

Research and Special Programs Administration

400 Seventh Street, S.W.
Washington, D.C. 20590

DOT-E 12110

EXPIRATION DATE: October 31, 1998

(FOR RENEWAL, SEE 49 CFR SECTION 107.109)

1. GRANTEE: Jet Propulsion Laboratory
   Pasadena, California

2. PURPOSE AND LIMITATION:

   a. This emergency exemption authorizes the one-time transportation in commerce of certain non-DOT specification cylinders containing xenon which are installed in a spacecraft. This exemption provides no relief from any Hazardous Materials Regulation (HMR) 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. 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.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR 173.302(a)(1) in that the prescribed packagings are not authorized.

5. BASIS: This emergency exemption is based on the application of Jet Propulsion Laboratory dated July 1, 1998 and additional information dated July 8 and July 16, 1998, submitted in accordance with 49 CFR 107.117 and a determination that it is necessary to prevent potential economic loss.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Xenon, compressed	2.2	UN2036	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packagings prescribed are three non-DOT specification composite cylinders that meet the manufacturing and design qualification testing requirements contained in the Jet Propulsion Laboratory's application for exemption on file with the Office of Hazardous Materials Exemptions and Approvals and which are part of the First Deep Space Spacecraft. The minimum design burst pressure of each cylinder is 6,015 psig. Cylinders are not equipped with pressure relief devices. Cylinders must be in conformance with the following:

(i) The propellant tank is a 6061-T6 aluminum lined carbon graphite epoxy composite cylinder in conformance with Lincoln Composites Model #220121. The maximum pressure during transportation is 1,100 psig.

(ii) The (two) plenum tanks are 6061-T62 aluminum lined carbon graphite epoxy composite cylinders in conformance with SCI model #5250. The maximum pressure during transportation is 100 psig.

b. OPERATIONAL CONTROLS - Emergency response information provided with the shipment and available via an emergency response telephone number must indicate that the receptacles are not fitted with pressure relief devices and provide appropriate guidance for explosive fire.

8. SPECIAL PROVISIONS:

a. This exemption authorizes the one-time shipment by exclusive use motor vehicle of the prescribed cylinders from the Jet Propulsion Laboratory in Pasadena, California to Kennedy Space Center in Florida.

b. A current copy of this exemption must be maintained at the Jet Propulsion Laboratory until the shipment is completed.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.

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

11. COMPLIANCE: 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 et seq:

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

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.

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.

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 incident involving the package and shipments made under the terms of this exemption.

Issued at Washington, D.C.:

JUL 28 1998

Alan I. Roberts
Associate Administrator for
Hazardous Materials Safety

(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.

Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, Washington, DC 20590-0001, Attention: Docket Section, 202-366-5046.

Dist: FHWA
PO: C.W. Freeman