U.S. Department
of Transportation
**Research and
Special Programs
Administration**

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

JAN 2 3 2003

DOT-E 11364
(FOURTH REVISION)

EXPIRATION DATE: December 31, 2004

(FOR RENEWAL, SEE 49 CFR § 107.109.)

1. GRANTEE: Staveley Instruments, Incorporated
Kennewick, Washington.

2. PURPOSE AND LIMITATION:

a. This exemption authorizes the manufacture, mark, sale and use of certain X-ray systems for the transportation in commerce of sulfur hexafluoride. This exemption provides no relief from the Hazardous Materials Regulations (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.

c. THIS EXEMPTION WILL NOT BE RENEWED.

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

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.304(a)(2) and § 175.3 in that the prescribed packaging is not authorized except as specified herein.

5. BASIS: This exemption is based on Staveley Instruments' application dated November 15, 2002 submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

| Hazardous materials description/proper shipping name | Hazard Class/ Division | Identification number | Packing Group |
|---|---|---|---|
| Sulfur hexafluoride | 2.2 | UN1080 | N/A |

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packagings prescribed are X-ray systems, consisting of an X-ray tube and other instrumentation assembled within an aluminum alloy shell. The aluminum shell is constructed of 6061-T6 or 6063-T6 pipe with end plates. The shell is filled with sulfur hexafluoride. The assembly must be in conformance with Staveley Instruments' drawings 65E090 or 9017939.00 and related drawings on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA) and with the following requirements:

(1) No X-ray system may be charged with sulfur hexafluoride to a pressure exceeding 52 psig at 70°F. Each X-ray system must be equipped with a safety relief device capable of limiting the pressure not to exceed 75 psig.

(2) Each shell must be capable of withstanding a burst pressure of not less than 600 psig.

(3) The X-ray system must be overpacked in strong outside containers. When so packed, the units are exempt from labeling, except when offered for transportation by air.

b. TESTING -

(1) Each shell, with end plates assembled in place, and prior to cathode-ray unit assembly, must be pressure tested to at least 150 psig without a leak.

(2) Each unit must be checked for leaks prior to shipment.

c. MARKING - Each outside container must be marked "DOT-E 11364".

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8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this exemption for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this exemption.

b. A person who is not a holder of this exemption, but receives a package covered by this exemption, may reoffer it for transportation provided no modifications or changes are made to the package and it is offered for transportation in conformance with this exemption and the HMR.

c. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each packaging manufactured under the authority of this exemption must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Exemptions and Approvals for a specific manufacturing facility.

e. A current copy of this exemption must be maintained at each facility where the package is manufactured under this exemption. It must be made available to a DOT representative upon request.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo only aircraft, and passenger-carrying aircraft.

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel or aircraft used to transport packages covered by this exemption. The shipper must furnish a copy of this exemption to the air carrier before or at the time the shipment is tendered.

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 Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.

- Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 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 § 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. (Sections 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 in Washington, D.C.:

JAN 23 2003
(DATE)

Robert A. McGuire
Associate Administrator
for Hazardous Materials Safety

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.

Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/exemptions. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: DL