



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

September 20, 2023

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 21455
(FIRST REVISION)

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: (See individual authorization letter)
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of radiation detectors that have not had a leak tightness test performed in accordance with the Hazardous Materials Regulations. 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 the development of this special permit only considered the hazards and risks associated with the transportation in commerce.
 - c. Unless otherwise stated herein, this special permit consists of the special permit authorization letter issued to the grantee together with this document.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.102 Special Provision 238 in that each detector must be tested to 1×10^{-10} cm³/s leak tightness standard before filling.
5. BASIS: This special permit is based on the application of Flour Marine Propulsion, LLC dated August 15, 2023, submitted in accordance with § 107.107

Tracking Number: 2023094439

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Boron trifluoride	2.3	UN1008	N/A Hazard Zone B

7. SAFETY CONTROL MEASURES:

a. PACKAGING: Prescribed packaging is a radiation detector that meets the requirement of 49 CFR 172.102 Special Provision 238 except that the detector was not leak tested during initial manufacturing. The detectors were manufactured by Mirion Technologies and contain irradiated boron trifluoride. The detector is packed in an IP-1 macro-encapsulation bag with activated alumina serving as the absorbent that is manufactured by Industrial Construction Environmental (ICE) Service Group, Inc. The inner containment is constructed of a PVC waterproof liner and its closure mechanism is a water and gas proof zipper. The inner containment is embedded within an exterior containment. The exterior of the soft-sided bag is constructed from geotextile material with a standard zipper to secure the macro-encapsulation bag. The IP-1 macro-encapsulation bag drawings are SA-C-90.44.18-Macro-2fLS and SA-C-56.40.16-Macro-2fLS. Drawings are on file with the Office of Hazardous Materials Safety (OHMS).

b. MARKING: The outside of each package must be plainly and durably marked "DOT-SP 21455".

c. OPERATIONAL CONTROLS:

- (1) Each package must be visually inspected on the outside prior to unloading and loading.
- (2) During loading, the package must be blocked and braced to minimize shock.
- (3) Approximately seven radiation detectors are authorized for transportation under the terms of this special permit.

8. SPECIAL PROVISIONS:

a. 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 or its contents and it is reoffered for transportation in conformance with this special permit and the HMR.

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

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.

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

11. COMPLIANCE: 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. **REPORTING REQUIREMENTS:** 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: AC/TG