



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

March 21, 2022

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 14287
(FOURTH REVISION)

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: (See individual authorization letter)

2. PURPOSE AND LIMITATION:

a. This special permit authorizes the one-time transportation, for source disposal purposes only, of sealed radioactive source capsules that are qualified as special form radioactive material under the provisions of this special permit. The sources are contained within Troxler Electronic Laboratories, Inc. portable nuclear gauge Models 257, 1255, 1257, 1403, 2226, 2376, 2401, 2402, 2451, 2452, 3216, 3218, 3241, 3401, 3411, 3430, 3440 3450, and 4350. The gauges have an installed Troxler Electronic/Gamma Industries Model A-100608 or QSA Global, Inc. (formerly AEA Technology QSA, Inc.) sealed capsule Model X.220, X.1188, X.1218, X.2105, AX1, X.1, or X.1/2, containing Americium-241 and, in some cases Cesium-137. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.

b. This special permit also authorizes the one-time transportation, for source disposal purposes only, of Troxler Electronic Laboratories, Inc. portable nuclear gauge Models 1255, 1257, 2226, 2376, 2401, 2402, 3216, 3218 3241A, 3241B, 3241C, 3320, 3330, 3401, 3411, 4301, 4302, 4350, 4430, 4441, 4442, and 4545 in their cases that no longer fully meet the Type A package documentation requirements of 49 CFR 173.415, provided those cases are in good condition, with no through-wall cracks and with properly functioning closure mechanisms.

c. This special permit also authorizes the one-time transportation, for source disposal purposes only, of Troxler Electronic Laboratories, Inc. portable nuclear gauge Models 1255, 1257, 2226, 2376, 2401, 2402, 3216, 3218, 3241C, 3320, 3330, 3401, 3411, 4301, 4302, 4441, 4442, and 4545 in their cases that are not in good condition, provided that the cases are overpacked into a UN 1A2 drum with sufficient packing material (foam, wood, etc.) to prevent damage to the case and gauge under normal conditions of transport.

d. This special permit also authorizes the one-time transportation, for source disposal purposes only, of Troxler Electronic Laboratories, Inc. portable nuclear gauge Models 257, 1205, 1351, 1352, 1403, 2451, 2452, 3218, 3221, 3222, and 4232 that no

longer fully meet the Type A package documentation requirements of 49 CFR 173.415, when overpacked, with or without their cases, into a UN 1A2 drum with sufficient packing material (foam, wood, etc.) to prevent damage to the case and gauge under normal conditions of transport.

e. The safety analyses performed in the development of this special permit only considered the hazards and risks associated with the transportation in commerce.

f. 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 §§ 173.469 and 173.476(a) insofar as this special permit provides certification the sealed capsules listed in section 7.b.1 of this special permit have been demonstrated to meet the requirements for special form radioactive material, and 49 CFR § 173.415 insofar as this special permit provides for shipment of packages that no longer meet the documentation requirements for Type A packages.
5. BASIS: This special permit is based on the application of Troxler Electronic Laboratories, Inc. dated July 20, 2021, submitted in accordance with § 107.105 and the public preceding thereon and additional information dated November 22, 2021 and March 7, 2022.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

| Hazardous Materials Description | | | |
|--|-------------------------------|------------------------------|----------------------|
| Proper Shipping Name | Hazard Class/ Division | Identification Number | Packing Group |
| Radioactive material, Type A package, special form, <i>non fissile or fissile-excepted</i> | 7 | UN3332 | N/A |
| Radioactive material, Type A package, non-special form, <i>non fissile or fissile-excepted</i> | 7 | UN2915 | N/A |

7. SAFETY CONTROL MEASURES:
 - a. PACKAGING: Type A packagings, or packagings specifically authorized by this Special Permit must be used. Each packaging may contain only one Troxler nuclear gauge.

b. OPERATIONAL CONTROLS:

1. The use of this special permit is limited to Troxler Electronic Laboratories, Inc. nuclear gauge Models 257, 1205, 1255, 1257, 1351, 1352, 1403, 2226, 2376, 2401, 2402, 2451, 2452, 3216, 3218, 3221, 3222, 3241A, 3241B, 3241C, 3320, 3330, 3401, 3411, 3430, 3440, 3450, 4232, 4301, 4302, 4350, 4430, 4441, 4442, and 4545 with a single installed Troxler Electronic/Gamma Industries Model A-100608 or QSA Global, Inc. (formerly AEA Technology QSA, Inc.) sealed capsule, as provided in the following table. The following table provides the permitted capsule model numbers, upper activity limits, and applicable manufacturing dates.

| Capsule Model No. | Am-241 Activity | Cs-137 Activity | Manufactured Before |
|--------------------------|------------------------|------------------------|----------------------------|
| A-100608 | 3.7 GBq (100 mCi) | N/A | N/A |
| X.220 | 4.625 GBq (125 mCi) | 0.37 GBq (10 mCi) | 4/1/81 |
| X.1188 | 11.1 GBq (300 mCi) | N/A | 2/23/88 |
| AX1 | 2.22 GBq (60 mCi) | N/A | 5/17/77 |
| X.1 | 2.22 GBq (60 mCi) | N/A | 5/17/77 |
| X.1/2 | 2.22 GBq (60 mCi) | N/A | 5/17/77 |
| X.1218 | N/A | .333 GBq (9 mCi) | 11/28/84 |
| X.2105 | 11.1 GBq (300 mCi) | N/A | 3/3/08 |

2. Each Troxler Electronic Laboratories, Inc. nuclear gauge listed in the table with Am-241 contents only may also contain an additional installed sealed capsule containing no more than 0.37 GBq (10 mCi) of Cesium-137 in special or normal form.

3. The sealed source capsule(s) must have no known or suspected defects. Sources must be secured properly within the gauge.

4. The sealed source capsule(s) must have a current satisfactory leak test in accordance with U.S. Nuclear Regulatory Commission or Agreement State license conditions.
5. All gauges shipped under this Special Permit must be inspected prior to shipment and checked for contamination by performing surface wipe tests in accordance with 49 CFR 173.443 and Troxler leak test instructions.
6. Persons offering shipments under this Special Permit must obtain authorization from Troxler prior to each shipment. Consignors should obtain and follow the Troxler Transportation Guide and specific instructions for use of this Special Permit from Troxler.
7. Pre-shipment notifications of all shipments to be made under this Special Permit must be provided to PHMSA at specialpermits@dot.gov and ramcert@dot.gov. Notifications must include scheduled date of shipment, name and location of shipper and identification of source, gauge, and packaging.
8. A receipt inspection must be made for any shipment conducted under this Special Permit. In addition to any reports required by the HMR, any significant damage to cases, gauges, or sources shall be documented and reported within 30 days to the Director, Office of Hazardous Materials Safety General Approvals and Permits Division.
9. This special permit authorizes a one-time transportation, for source disposal purposes only.

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.
- c. Each package must be conspicuously marked "DOT-SP 14287" with figures at least 1" (2.5 cm) high.
- d. Persons offering hazardous materials under this special permit must be on file (organization, address, telephone number, and email address optional) with the PHMSA Office of Special Permits and Approvals. The filings may be provided by either the consignor or consignee. Filings must be provided to the Office of Special Permits and Approvals, Pipeline and Hazardous Materials Safety Administration., U.S. Department of

Transportation, 400 7th Street, SW, Washington, D.C. 20590-0001, Attention: PHH-31; or by email to specialpermits@dot.gov.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, cargo aircraft, and cargo vessel only.
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each motor vehicle, cargo aircraft, or cargo vessel 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 B Immediate notice of certain hazardous materials incidents, and 171.16 B Detailed hazardous materials incident reports. In addition, the

grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety -- OHMSPA, 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, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.

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: MCONROY/KAH