

May 21, 2021



U.S. Department  
of Transportation

East Building, PHH-30  
1200 New Jersey Avenue S.E.  
Washington, D.C. 20590

**Pipeline and Hazardous  
Materials Safety Administration**

DOT-SP 12155  
(THIRTEENTH REVISION)

**EXPIRATION DATE: 2025-03-31**

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: S&C Electric Company  
Chicago, IL
2. PURPOSE AND LIMITATION:
  - a. This special permit authorizes the transportation in commerce of a non-DOT specification pressure vessel containing sulfur hexafluoride which is a component of an electric utility circuit interrupter unit. 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 development of this special permit only considered the hazards and risks associated with transportation in commerce.
  - c. No party status will be granted to this special permit.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: The marking requirements of § 172.301(c), § 173.304a in that a non-DOT specification packaging is not authorized, except as specified herein and § 172.504 in that placarding is waived for highway transportation under certain conditions.
5. BASIS: This special permit is based on the application of S&C Electric Company dated April 27, 2021 submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR 172.101):

<b>Hazardous Materials Description</b>			
<b>Proper Shipping Name</b>	<b>Hazard Class/ Division</b>	<b>Identification Number</b>	<b>Packing Group</b>
Sulfur hexafluoride	2.2	UN1080	N/A

7. SAFETY CONTROL MEASURES:a. PACKAGING - Packagings prescribed are:

(1) A non-DOT specification pressure vessel made of porcelain as described in the application of S&C Electric Company and conforming to S&C drawing PA-7223/7224, commonly referred to as "2000 Series and Mark Series" on file with the Office of Hazardous Materials Safety Approvals and Permits Division (OHMSAPD). The maximum service pressure may not exceed 78 psig or 39 psig, respectively. Each porcelain vessel must have a design burst pressure of 7 times its respective filling pressure at 70°F (i.e., 575 or 276 psig). Each pressure vessel must be fitted with a pressure relief device conforming to the requirements and operational characteristics described in the special permit application and be set to relieve at 115-135 psig or 60-70 psig, respectively. Each porcelain vessel must be packaged in a strong outside packaging for shipment in accordance with S&C Electric drawing S-91205-½, and the photographs submitted with the application as follows:

(i) Steel casing (18 gauge) if part of a pre-assembled electrical interrupter;

(ii) Steel casing (18 gauge) with Styrofoam end cushions, packaged within a ½" plywood metal strapped crate for stand-alone replacement units;  
or

(iii) Steel casing (18 gauge) and a steel overpack for cargo aircraft only shipments of stand-alone units.

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(2) A non-DOT specification pressure vessel made of spirally-wound fiberglass as described in the application for special permit. Pressure vessel must conform with S&C drawings SXA-3124, 3128, 3129, and 3185 on file with the OHMSAPD. The maximum service pressure may not exceed 125 psig. The pressure relief shear discs must be set at a minimum relief pressure of 290 psig for units charged to 85 psi, and 509 psi for units charged to a maximum of 125 psi. Each pressure vessel must be: charged in accordance with the information on file with the OHMSAPD no unit may contain more than 6 pounds of sulfur hexafluoride; and capable of withstanding an internal pressure of five times the maximum relief pressure without bursting. When not shipped as a part of a circuit interrupter unit, each fiberglass vessel must be packaged in a strong outside packaging as specified in § 173.301(a)(9).

b. TESTING -

(1) Each porcelain pressure vessel must successfully pass a hydrostatic test of 5 times the filling pressure at 70°F, without measurement of expansion.

(2) Each fiberglass pressure vessel must successfully pass a pneumatic pressure test to 300 psi.

(3) Each pressure vessel must be leak tested before shipment. Leakage rate may not exceed 0.015 oz. per year.

(4) Periodic re-testing is not required.

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 modifications or changes are made to the package and it is reoffered for transportation in conformance with this special permit and the HMR.

b. Marking of each pressure vessel with the special permit number is not required; however, the outside packaging must meet the marking and labeling requirements of 49 CFR Part 172, Subparts D and E.

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- c. PLACARDING - The placarding requirements of § 172.504 are waived for highway transportation when each circuit interrupter unit is marked with the identification number on two sides in accordance with §§ 172.332 or 172.336.
- d. A current copy of this special permit must be maintained at the principal place of business of each re-shipper and at each facility where the package is offered or reoffered for transportation.
- e. This special permit serves as a Competent Authority Approval (CA-1999020008) issued by the Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, of the United States Department of Transportation, in accordance with Paragraph 7.9 of the International Maritime Dangerous Goods (IMDG) Code and Packing Instruction 200 of the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI).
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, and cargo aircraft only.
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel and aircraft used to transport packages covered by this special permit. The shipper must furnish a current copy of this special permit 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 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.

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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 the 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-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

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Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at [http://hazmat.dot.gov/sp\\_app/special\\_permits/spec\\_perm\\_index.htm](http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm). Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: Andrew Eckenrode