



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

June 13, 2024

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 21678

EXPIRATION DATE: 2026-04-30

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Moxion Power Co.
Mill Valley, CA
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of lithium ion batteries installed in cargo transport units (CTU) by cargo-only aircraft within the United States when transported in support of disaster relief efforts. 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. 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: 49 CFR § 172.102(c)(1) Special Provision 389 in that transportation aboard cargo-only aircraft requires an approval, and § 172.302(c) in that the special permit marking is not required.
5. BASIS: This special permit is based on the application of Moxion Power Co. dated November 20, 2023, submitted in accordance with § 107.105 and the public proceeding thereon.

Tracking Number: 2023114964

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Lithium batteries installed in cargo transport unit <i>lithium ion batteries or lithium metal batteries</i>	9	UN3536	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING: Prescribed packaging is a non-specification cargo transport unit (CTU) containing one lithium ion battery power unit (MP-75) as described in the application on file with the Office of Hazardous Materials Safety.

- (1) Each battery power unit must:
 - (i) Consist of one hundred twenty (120) modules that are securely connected together and attached to the interior structure of the CTU.
 - (ii) Have a maximum rated energy capacity of 600 kWh.
 - (iii) Be equipped with an effective means of preventing dangerous reverse current flow for cells connected in parallel.
 - (iv) Contain a battery management systems to prevent overcharge, short-circuits, and over discharge between the modules in accordance with 38.3.3(g) of UN Manual of Tests and Criteria.
 - (v) Must be transported at a state of charge not exceeding 30 % of its rated capacity.
 - (vi) Be contained within a single strong outer enclosure secured in such a manner as to prevent short circuits, accidental operation, and significant movement relative to the enclosure under the shocks, loadings, and vibrations normally incident to transportation.
- (2) The modules connected together to form the battery power unit must have a strong impact-resistant casing.

(3) Must be of sturdy construction 69.1 inches wide by 70 inches high with a length of 162.9 inches.

(4) The gross weight of the CTU may be not more than 5,670 kg (12,500 pounds).

b. TESTING:

(1) The battery power units' component cells must be of a type that has been successfully subjected to all applicable tests as required by Part III, Section 38.3, of the UN Manual of Tests and Criteria, Seventh Revised Edition.

(2) The modules comprising the battery power units must be of a type that has been successfully subjected to all applicable tests as required by Part III, Section 38.3, of the UN Manual of Tests and Criteria, Seventh Revised Edition.

c. OPERATIONAL CONTROLS:

(1) The battery power unit installed in a CTU are designed only to provide power external to the CTU.

(2) Hazardous materials necessary for the safe and proper operation of the CTU (e.g., fire extinguishing systems and air conditioning systems), must be properly secured to or installed in the cargo transport unit.

(3) Hazardous materials not necessary for the safe and proper operation of the CTU must not be transported within the CTU.

d. MARKING REQUIREMENTS:

(1) The shipping container must carry on each end and side a Class 9 placard UN3536 identification number in accordance with § 172.332, and display the lithium battery mark.

(2) The batteries inside the CTU are waived from marking or labelling requirements Subparts D and E of Part 172.

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. This special permit authorizes shipments by cargo-only aircraft when in support of disaster relief efforts.
9. MODES OF TRANSPORTATION AUTHORIZED: Cargo-only aircraft.
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each aircraft used to transport packages covered by this special permit. The shipper must furnish a 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.

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.:

A handwritten signature in blue ink, appearing to read "William Schoonover", is written over a faint circular stamp.

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: SH/TG