



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

**March 20, 2026**

1200 New Jersey Avenue, SE  
Washington, DC 20590

DOT-SP 22095

**EXPIRATION DATE: 2028-02-29**

(FOR RENEWAL, SEE 49 CFR 107.109)

1. **GRANTEE:** LG Energy Solution, Ltd.  
Seoul, South Korea  
  
**U.S. AGENT:** LG Energy Solution Vertech, Inc.  
Irvine, CA
2. **PURPOSE AND LIMITATION:**
  - a. This special permit authorizes the transportation in commerce of lithium ion batteries each with a mass exceeding 35 kg net weight per package aboard cargo-only aircraft. This special permit provides no relief from the Hazardous Materials Regulations (HMR) or the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI) 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.
  - d. This special permit serves as an approval under Special Provision A99 of the ICAO TI, as an approval under 49 CFR 173.185(b)(5), and as a "Competent Authority Approval" as defined under 49 CFR § 107.1.
3. **REGULATORY SYSTEM AFFECTED:** 49 CFR Parts 106, 107 and 171-180.
4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR § 172.101 Hazardous Materials Table Column (9B) in that a battery may not exceed 35 kg when transported aboard aircraft, except as specified herein; and § 173.185(a)(1) in that certain lithium ion

Tracking Number: 2025086275

batteries have been subjected to the tests and meet the criteria in part III, subsection 38.3 of the UN Manual of Tests and Criteria, 8th Revised Edition.

5. BASIS: This special permit is based on the application of LG Energy Solution, Ltd. dated September 7, 2025, submitted in accordance with § 107.105 and the public proceeding thereon and additional information dated October 26, 2025.
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>
Lithium ion batteries <i>including lithium ion polymer batteries</i>	9	UN3480	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING:

- (1) Each battery must have an impact-resistant casing.
- (2) Each battery (Model EM102156PGS1), as described in LG Energy Solution, Ltd.'s application dated September 7, 2025, and on file with the Office of Hazardous Materials Safety, must be packaged as follows:
  - (i) Each battery must be placed on the bottom part consisting of a wooden pallet and a pallet pad with attached desiccants.
  - (ii) A PE vinyl sheet must be placed on top of the battery before enclosing the battery with a cardboard cap assay on the top and the sides.
- (3) The completed package must be banded to the pallet for protection and to prevent movement.
- (4) Only one battery is permitted per package
- (5) Packages offered for transportation must be in accordance with the requirements in Packing Instruction 974 of the Supplement to the ICAO TI. .

(6) Waste lithium batteries and lithium batteries being shipped for recycling or disposal are forbidden under this special permit.

(7) Batteries must not be packed in the same outer packaging with substances and articles of Class 1 (explosives) other than Division 1.4S, Division 2.1 (flammable gases), Class 3 (flammable liquids), Division 4.1 (flammable solids), or Division 5.1 (oxidizers).

b. TESTING:

(1) Each lithium ion cell, identified as LG Energy Solution JF2S Lithium-Ion Battery Cell must be of a type that has successfully passed the required tests in accordance with the 38.3 of the UN Manual of Tests and Criteria, 8<sup>th</sup> Revised Edition.

(2) Each battery must be of a type tested in accordance with the UN Manual of Tests and Criteria, 8<sup>th</sup> Revised Edition.

c. OPERATIONAL CONTROLS:

(1) Authorized batteries are each comprised of 32 prismatic lithium ion cells with a mass equal to or greater than 12 kg and not exceeding 120 kg (265 pounds) and have a total usable energy capacity of 15.87 kWh each in a configuration of 32S1P.

(2) Cells and batteries must be protected against short-circuiting and be equipped with a means of venting.

(3) Each battery must be offered for transportation at a state of charge not exceeding 30%.

(4) Cells or batteries that are leaking or liable to rapidly disassemble, dangerously react produce a flame or a dangerous evolution of heat or a dangerous emission of toxic, corrosive, or flammable gases, or vapors under normal conditions of transport may not be transported under this special permit.

(5) The battery must be secured to prevent shifting and minimize vibrations.

(6) Any changes to the battery from the one listed above invalidates this special permit.

d. MARKING: Each package must be marked with the special permit number, "DOT-SP 22095", in accordance with §172.301(c).

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 and it is offered for transportation in conformance with this special permit, the HMR, and the ICAO TI.

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 in no way affects the need to obtain any required authorizations from other agencies of the United States Government or from the competent authorities of countries of origin, transit, destination, and the State of Operator.

d. The grantee must maintain the following record and upon request make this record available to DOT representatives or enforcement officials. The record must contain a listing and number of shipments made to include:

- (1) Dates of shipment; and
- (2) Description of each type of shipment.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and cargo-only aircraft.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo-only 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.:



for William Quade  
Acting 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