

March 12, 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 20929
(SECOND REVISION)

EXPIRATION DATE: 2023-11-30

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: LG Energy Solution Wrocław Spółka Z Ograniczona
Odpowiedzialnoscia
Kobierzyce, Poland

US AGENT: LG Chem Michigan Inc.
Troy, Michigan

2. PURPOSE AND LIMITATIONS:

- a. This special permit authorizes the transportation of lithium ion batteries which exceed the allowable weight limit (35 kg) by 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 development of this special permit only considered the hazards and risks associated with 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 and Packing Instruction 965 of the ICAO TI and as a "Competent Authority Approval" as defined under 49 CFR § 107.1.

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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 lithium ion batteries may have a mass exceeding 35 kg per package and 173.185(b) in that lithium batteries must be packaged in UN specification packaging, as specified herein.
5. BASIS: This special permit is based on the application of LG Chem Wroclaw Energy (LGCWCA) dated December 30, 2019, submitted in accordance with § 107.109 and additional information dated January 29, 2021.
6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Lithium ion batteries <i>including lithium ion polymer batteries</i>	9	UN3480	N/A

7. SAFETY CONTROL MEASURES:

a. OPERATIONAL CONTROLS:

(1) Only battery packs each having a watt-hour rating of 11.4 kWh comprised of eight modules connected in series as specified in LGCWCA's application updated on August 8, 2019 may be offered for transportation under the terms of this special permit.

(2) Each module must consist of LG P33 cells in a 12S1P configuration.

(3) The state of charge for lithium ion battery packs must not be more than 30% when offered for transportation.

(4) Each battery pack must be equipped with a battery management system capable of preventing overcharge, short-circuiting, and over discharge.

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(5) Cells and battery packs must be protected against short-circuiting.

b. TESTING REQUIREMENTS:

(1) Each LG P33 cell within the battery pack must be of a type tested in accordance with the UN Manual of Tests and Criteria, 6th Revised Edition.

(2) Each module must be of a type tested in accordance with the UN Manual of Tests and Criteria, 6th Revised Edition.

c. PACKAGING REQUIREMENTS:

(1) Each battery pack which has a mass of 12 kg or greater must have a strong, impact-resistant outer casing including a steel frame, bottom, and top cover;

(2) Each battery pack must be packed in a strong outer packaging (non-UN specification plywood crate);

(3) The battery pack must be secured within the crate by means of bolts by securing to a custom deck board;

(4) The net weight of a package (battery pack assembled with battery management system and casing) may not exceed 160 kg (353 pounds); and

(5) Only one battery may be packed within a package.

d. MARKING: Each package must be marked with the special permit number DOT-SP 20929 accordance with § 172.301(c).

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this special permit, but receives a packaging covered by this special permit, may reoffer it for transportation provided no modification or change is made to the packaging and it is offered 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. It must be made available to a DOT representative upon request.

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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

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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 Materials Safety Administration, U.S. Department of Transportation, East Building PHH-30, 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 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: Steve H/Stacy Grey