June 17, 2021



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

Pipeline and Hazardous Materials Safety Administration

DOT-SP 21187

EXPIRATION DATE: 2023-05-31

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. <u>GRANTEE</u>: Enerdel, Inc. Indianapolis, IN

2. PURPOSE AND LIMITATION:

a. This special permit to authorize the transportation in commerce of lithium ion batteries exceeding 35 kg by cargoonly 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. No party status will be granted to this special permit.

d. This special permit serves as an approval under the ICAO TI Special Provision A99 and as a "Competent Authority Approval" as defined under 49 CFR § 107.1.

- 3. <u>REGULATORY SYSTEM AFFECTED</u>: 49 CFR Parts 106, 107 and 171-180 and the ICAO TI.
- 4. <u>REGULATIONS FROM WHICH EXEMPTED</u>: 49 CFR § 172.101 Column (9B) in that a lithium ion battery may not exceed 35 kg when transported by cargo aircraft, except as provided herein.

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- 5. <u>BASIS</u>: This special permit is based on the application of Enerdel, Inc. dated January 29, 2021 submitted in accordance with § 107.105 and the public proceeding thereon.
- 6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Lithium ion batteries including lithium ion polymer batteries	9	UN3480	N/A

7. SAFETY CONTROL MEASURES:

- a. <u>PACKAGING</u>: Authorized batteries must be individually packaged in packagings of the type prescribed in 49 CFR 173.185(b)(5).
- b. OPERATIONAL CONTROLS:

(1) Each battery assembly shall be assembled from modules containing CE175-360, CP160-365 and/or CE250-370 cells into either energy pack "PE" or power pack "PP" configurations whose capacity is between 32-100 Ah with a maximum voltage between 49-810 V as described in Enerdel Inc.'s application dated January 29, 2021 and on file with the Office of Hazardous Materials Safety.

(2) Cells and batteries must be protected against short-circuiting.

(3) Cells or batteries connected in parallel must be equipped with an effective means to prevent dangerous reverse current flow.

(4) All of the batteries must be offered at a state of charge not greater than 30% for transportation by cargo aircraft.

(5) The net weight of the battery assembly may not exceed 500 kg.

(6) Maximum energy of a battery may not exceed 73,800 Wh.

c. <u>TESTING REQUIREMENTS</u>: Each cell and battery must be a type that has successfully passed the required tests in accordance with the UN Manual of Tests and Criteria.

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, 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 the Operator.

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. <u>COMPLIANCE</u>: 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 <u>et</u> seq:

- All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- 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 <u>et seq</u>., 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. <u>REPORTING REQUIREMENTS</u>: 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 Continuation of DOT-SP 21187

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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.

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: Andrew Eckenrode