

Pipeline and Hazardous Materials Safety Administration 1200 New Jersey Avenue, SE Washington, DC 20590

DOT-SP 21932

EXPIRATION DATE: 2027-07-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. <u>GRANTEE</u>: EnerVenue, Inc.

Fremont, CA

2. <u>PURPOSE AND LIMITATION</u>:

- a. This special permit authorizes the transportation in commerce of non-DOT specification cylinders (battery receptacles) containing compressed flammable gas as UN3537, articles containing flammable gas, n.o.s. This special permit provides no relief from the Hazardous Materials Regulations (HMR), the International Maritime Dangerous Goods (IMDG) Code, 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. The non-DOT specification cylinders (battery receptacles) may be used in accordance with 4.1.6.1.14 of the IMDG Code and Packing Instruction 200 of the ICAO TI.
- e. This special permit serves as an approval under Special Provision A2 of the ICAO TI 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 IMDG Code.
- 4. <u>REGULATIONS FROM WHICH EXEMPTED</u>: 49 CFR § 172.101 Hazardous Materials Table Column (9B) in that "50 kg" is substituted for "Forbidden" for the entry associated

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- with UN3537, articles containing flammable gas, n.o.s.; §§ 173.301(f) and 173.302(a) in that non-DOT specification cylinders (receptacles) are authorized, as specified herein.
- 5. <u>BASIS</u>: This special permit is based on the application of EnerVenue, Inc. dated January 20, 2025, submitted in accordance with § 107.105 and the public proceeding thereon.

6. <u>HAZARDOUS MATERIALS (49 CFR 17</u>2.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Articles containing flammable gas, n.o.s. (contains hydrogen gas)	2.1	UN3537	N/A

7. SAFETY CONTROL MEASURES:

- a. PACKAGING: Prescribed packaging is as follows:
 - (1) Non-DOT specification stainless steel cylinders (battery receptacles) (Model ESV-E) which are not electrically connected and are shipped as components of a nickel-hydrogen battery must be securely placed on a wooden pallet or within a crate in a horizontal position as described in EnerVenue, Inc.'s May 8, 2025, application on file with the Office of Hazardous Material Safety. The pressure relief devices on the receptacles must stay closed during transportation.
 - (2) The nickel-hydrogen battery must meet the requirements of § 173.159(f) for a nonspillable, wet, electric storage battery. There must be no release of gas or liquid during the vibration or pressure differential tests.

b. OPERATIONAL CONTROLS:

- (1) Cylinders (battery receptacles) must be constructed to ASME Boiler and Pressure Vessel Code Section VIII standards.
- (2) Cylinders (battery receptacles) are used as components of the Energy Rack system authorized in DOT-SP 21772. This special permit authorizes the cylinders (battery receptacles) to be transported individually for testing, evaluation, or to replace previously installed battery receptacles.

- (3) Cylinders (battery receptacles) must be protected against short-circuiting.
- (4) Each cylinder (battery receptacle) has a volumetric capacity of 22.7 L (6 gallons) and contains potassium hydroxide solution in water between 25% and 30% in concentration and compressed hydrogen not exceeding 220 psig during transportation.
- (5) The cells within the cylinders (battery receptacles) must be equipped with an effective means of preventing dangerous reverse current flow when the cells are connected in parallel.
- (6) The number of cylinders (battery receptacles) on a pallet or within a crate may not exceed 49 and the total weight may not exceed 2,268 kg (5,000 pounds).
- (7) Emergency response information provided with the shipment and available via an emergency response telephone number must provide appropriate guidance in case of fire exposure or an incident.
- (8) Cylinders (battery receptacles) must be transported at a state of charge not exceeding 30%.
- (9) The energy content in each cylinder (battery receptacle) may not exceed 1.2 kWh.
- c. <u>MARKING</u>: Each cylinder (battery receptacle) must be marked with the special permit number "DOT-SP 21932".

8. SPECIAL PROVISIONS:

- a. Under the terms of this special permit, the grantee may only offer hazardous materials (i.e., the grantee is not authorized as a carrier).
- b. 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 reoffered for transportation in conformance with this special permit, the HMR, ICAO TI and the IMDG Code.
- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- d. 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, and transit.

- 9. <u>MODES OF TRANSPORTATION AUTHORIZED</u>: Motor vehicle, rail freight, cargo vessel, and cargo-only aircraft.
- 10. <u>MODAL REQUIREMENTS</u>: A current copy of this special permit must be carried aboard each cargo vessel, motor vehicle or cargo 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. <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 seq</u>:
 - 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. <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 this

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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: Steve H/ae