

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

## Pipeline and Hazardous Materials Safety Administration

# DOT-SP 21138 (FIRST REVISION)

(FOR RENEWAL, SEE 49 CFR 107.109)

- 1. GRANTEE: (See individual authorization letter)
- 2. PURPOSE AND LIMITATIONS:
  - a. This emergency special permit authorizes the transportation in commerce aboard motor vehicle of defective lithium—ion batteries in 4G fiberboard outer boxes that were used to transport replacement batteries. 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 development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not 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.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.185(f)(3) in that a 4G fiberboard box that meets the Packing Group II performance criteria is not authorized, except as specified herein.

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- 5. <u>BASIS</u>: This emergency special permit is based on the application of LG Energy Solution dated November 23, 2020, submitted in accordance with § 107.117 and the determination it is necessary to protect life and property.
- 6. HAZARDOUS MATERIALS (49 CFR 172.101):

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

## 7. SAFETY CONTROL MEASURES:

- a. <u>PACKAGING</u>: Prescribed packaging is a UN 4G fiberboard box used to transport new replacement batteries and consists of:
  - (1) INNER PACKAGING: A leakproof plastic polyethylene sheet must be placed in the bottom of the 4G fiberboard box and a second polyethylene sheet must be placed over the battery completely covering the battery and its terminal leads and wires.
  - (2) INTERMEDIATE CUSHIONING MATERIAL: The completely enclosed inner packaging containing not more than one (1) battery must be surrounded by expanded polystyrene foam pads on two sides and on top to cushion and secure the inner packaging and to prevent movement and further damage of the battery within the packaging during transportation.
  - (3) OUTER PACKAGING: No more than one (1) inner packaging surrounded by the intermediate cushioning material must be placed in a UN 4G fiberboard box meeting Packing Group II performance criteria that was used to transport the new replacement battery. The outer box must be taped closed according to battery manufacturer procedures specified in the special permit application and placed on a wooden pallet. Any damaged outer packaging must not be used for the battery.

- (4) The outer boxes may not be stacked up to more than 3 meters in height during transportation.
- (5) A sticker containing the marking information in paragraph 7.b. must be inserted into the replacement battery packages before the packages are shipped to the customer's residence. The sticker must be a standard red label to avoid any confusion with instructions to the installers/packagers. The stickers must be placed on the outside of the re-used outer packaging before the one-way transportation from the customer residence to local warehouses/temporary storage facilities for further handling of the battery. The stickers must be used to update the existing marking used to transport the replacement battery.
- (6) The re-used and re-marked packagings and their contents must be quarantined from other inventory of packagings and stored away from heat.
- (7) The net weight (battery only) of a package may not exceed 214 pounds (97 kg).
- b. <u>MARKING</u>: The package must be marked as follows with characters at least as high as the existing marking and no smaller than 12 mm:

**UN3480** 

Waste lithium-ion battery (D003) RQ DOT-SP 21138 Damaged/defective lithium-ion battery

#### c. OPERATIONAL CONTROLS:

- (1) This special permit is limited to the transportation of the number of lithium ion batteries specified in the application on file with the Office of Hazardous Materials Safety Approvals and Permits Division (OHMSAPD) and identified as RESU10H (Type-R), with each battery nominally rated at 9.8 kWh, from residential locations to local warehouses/temporary storage facilities not exceeding 150 miles.
- (2) Each of the batteries must have its energy content reduced by reducing the state of charge (SOC) to 30% or less but not less than 16% for transportation.

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- (3) A preprinted label indicating the battery has an SOC of 30% or less must be affixed to the outer packaging. Onsite personnel must also take photographs confirming the discharge state for uploading to a central database, which may be referenced and/or audited as necessary.
- (4) Each shipment prepared and offered under the terms of this special permit must be performed by employees having substantial experience and training in packaging, repackaging, and transportation of batteries and in installation of lithium ion batteries and energy storage systems.
- (5) Transportation is limited to private carriage or contract carriage under exclusive use.
- (6) The re-packaged batteries must be transported using dedicated motor vehicles.
- (7) The confined spaces in motor vehicles transporting batteries must have adequate ventilation to prevent accumulation of gases vented from the packagings by having an air exchange rate of at least five times per hour.

#### 8. SPECIAL PROVISIONS:

- a. A person who is not a holder of this special permit, but 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 and the HMR.
- b. A current copy of this special permit must be maintained at each facility where the package is reoffered for transportation.
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each motor vehicle used to transport packages covered by this special permit.

- 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  $\underline{\text{et seq.}}$ , 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

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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

Will This

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 <a href="https://www.phmsa.dot.gov/approvals-and-permits/hazmat/special-permits-search">https://www.phmsa.dot.gov/approvals-and-permits/hazmat/special-permits-search</a>. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: Steve H/Kenny Herzog