May 31, 2022



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

DOT-SP 21362

EXPIRATION DATE: 2022-12-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. <u>GRANTEE</u>: Environmental Protection Agency and contractors acting on their behalf Chicago, IL

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

a. This emergency special permit authorizes the transportation in commerce of certain damaged or defective waste lithium ion cells or batteries and those contained in equipment in specialized packagings for disposal or recycling. 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.

- c. No party status will be granted to this special permit.
- 3. <u>REGULATORY SYSTEM AFFECTED</u>: 49 CFR Parts 106, 107 and 171-180.
- 4. <u>REGULATIONS FROM WHICH EXEMPTED</u>: 49 CFR § 173.185(f)(1) in that each cell or battery must be placed in individual, non-metallic inner packaging that completely encloses the cell or battery; and § 173.185(f)(3) in that each inner packaging must be individually placed in each outer packaging and that UN 4G packagings are not authorized, except as provided herein.
- 5. <u>BASIS</u>: This emergency special permit is based on the application of the Environmental Protection Agency (EPA) dated May 2, 2022, and supplemental information dated May 12 and 13, 2022, submitted in accordance with § 107.117 and the determination it is necessary to protect life and property.

6. <u>HAZARDOUS MATERIALS (49 CFR 172.101)</u>:

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Lithium ion batteries including lithium ion polymer batteries	9	UN3480	N/A
Lithium ion batteries contained in equipment <i>including lithium ion polymer batteries</i>	9	UN3481	N/A

7. <u>SAFETY CONTROL MEASURES</u>:

a. <u>OPERATIONAL CONTROLS</u>:

(1) The dedicated vehicles transporting the waste materials including damaged and defective lithium ion cells and batteries and those contained in equipment as enumerated in Paragraph 6 must be driven by HazMat trained drivers from the point of collection (a clean-up site in Morris, IL) to disposal or recycling facilities.

(2) The confined spaces in vehicles must have adequate ventilation to prevent accumulation of gases vented from the outer packaging by having an air exchange rate of at least five times per hour.

(3) Damaged or defective cells or batteries 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 must be transported only if for a period of at least seven (7) days prior to transport there is no evidence of venting, leakage, heat, smoke, fire, or other adverse reaction.

b. <u>PACKAGING</u>: The prescribed packagings are packaging configuration #1 or packaging configuration #2 as described below:

(1) Packaging configuration #1:

(i) Inner Packaging: All exposed cell or battery terminals must be protected with non-conductive electrical tape or by placing cells or batteries in a plastic bag. Taped and bagged cells or batteries must be

surrounded by the thermal runaway shield (TRS®) silver sheet/pouch and dunnage packaging material. Cells or batteries or those contained in equipment thus prepared must be placed in the SafeCase® lined with the TRS®. The TRS® consists of a polymer enclosure with a carbon fiber core material containing a cooling liquid as described in the supplemental information dated May 12, 2022.

(ii) Outer Packaging: The inner packaging must be placed in a UN specification 4G box meeting the Packing Group I performance criteria.

(2) Packaging configuration #2:

(i) Inner Packaging: All exposed cell or battery terminals must be protected with non-conductive electrical tape or by placing cells or batteries in a plastic bag. Taped or bagged cells or batteries must be placed in a steel drum sleeved with the flame impact barrier (SafeDRUM®) starting from the bottom of the drum in a single layer and consecutively placing the SafePlate® (TRS® material and flame impact barrier) between each layer of cells or batteries in a vertical manner. Cells and batteries must not be stacked and even vertical spacing must be maintained between the SafePlates® in the stack. The bottom and the top of the drum must have low density impact foam to prevent puncture of the TRS® and for structural support, respectively.

(ii) Outer Packaging: The SafeDRUM® consisting of UN 1A2 steel drum meeting the Packing Group I performance criteria with a cylindrical sleeve of flame impact barrier in the interior serves as an outer packaging

(3) Each outer packaging in configuration # 1 or #2 may contain not more than 2.5 kWh of nominal energy content.

(4) The outer packagings must be leak-proof to prevent the potential release of electrolyte and a venting device must be used for leaking damaged or defective waste cells or batteries.

c. <u>MARKING</u>:

(1) Each package covered under the terms of this special permit must be durably and legibly marked and displayed on a background of contrasting color with the following:

(i) "DOT-SP 21362".

(ii) The words: "Batteries for Disposal or Recycling: Contains Damaged or Defective Lithium Batteries" in letters at least 12 mm (0.5 inch) in height.

(iii) "Forbidden for Transport by Aircraft or Vessel- Ground shipment only".

(iv) Lithium battery mark as described in 49 CFR 173.185(c)(3).

(v) An emergency response telephone number in case of damage to the packaging or contents.

8. <u>SPECIAL PROVISIONS</u>:

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 offered or reoffered for transportation.

9. <u>MODES OF TRANSPORTATION AUTHORIZED</u>: Motor vehicle.

10. <u>MODAL REQUIREMENTS</u>:

a. A current copy of this special permit must be carried aboard each motor vehicle used to transport packages covered by this special permit.

b. Each package may be marked with a QR code which when scanned provides a direct link to a specific URL where the most recent revision of the special permit can be viewed or downloaded.

- 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 <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 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.:

Jack By

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

PO: Steve H/ae