

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

Pipeline and Hazardous Materials Safety Administration

DOT-SP 21105 (SECOND 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 of certain damaged or defective waste lithium batteries and batteries of other chemistries in the same outer packaging from a Superfund site 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. 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 § 172.102(c)(1)
 Special Provision 130(d) in that batteries of different chemistries may be packaged in the same package and 49 CFR § 173.185(f)(1) and (3) in that each damaged or defective button cell may not be placed in an individual packaging and more than one damaged or defective lithium cell or battery per package are authorized, as specified herein.

- 5. BASIS: This emergency special permit is based on the application of US EPA Region 5 dated April 7, 2021, 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 ion polymer batteries	9	UN3480	N/A
Lithium ion batteries contained in equipment including lithium ion polymer batteries	9	UN3481	N/A
Lithium metal batteries including lithium alloy batteries	9	UN3090	N/A
Lithium metal batteries contained in equipment including lithium alloy batteries	9	UN3091	N/A
Batteries, wet, non-spillable, electric storage	8	UN2800	N/A
Batteries, wet, filled with alkali, electric storage	8	UN2795	N/A
Batteries, wet, filled with acid, electric storage	8	UN2794	N/A
Mercury contained in manufactured articles	8	UN3506	N/A
Batteries, dry, sealed, n.o.s.	See Special Provision 130		

7. SAFETY CONTROL MEASURES:

a. OPERATIONAL CONTROLS:

- (1) The dedicated vehicles transporting the waste materials including damaged and defective lithium batteries enumerated in Paragraph 6 must be driven by HazMat trained drivers from the point of collection (a Superfund site in Mount Horeb, Dane County, Wisconsin) to disposal or recycling facilities.
- (2) The confined spaces in vehicles transporting damaged or defective waste button cells 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. PACKAGING:

(1) INNER PACKAGING:

- (i) WASTE MATERIALS OTHER THAN DAMAGED OR DEFECTIVE LITHIUM BUTTON CELLS: Each damaged or defective cell or battery, including those contained in or packed with equipment, must be individually packed in a non-metallic packaging that completely encloses each cell, battery, or piece of equipment.
- (ii) DAMAGED OR DEFECTIVE WASTE BUTTON CELLS: An inner packaging is not required provided the outer packaging complies with paragraphs 7.b.(2)(i) through (iii).
- (iii) SILICONE-COATED MAXELL CELLS: Damaged or defective cells or batteries coated in silicone must be placed in a plastic inner packaging weighing not more than 9.1 kg (20 pounds).

- (2) OUTER PACKAGING: The inner packagings must be placed in a vented 55-gallon metal outer packaging lined with thermally insulating fire suppressant, as described in US EPA Region 5's application dated August 26, 2020 and on file with the Office of Hazardous Materials Safety, in the following manner:
 - (i) Approximately three inches of granular thermally insulating fire suppressant must be placed at the bottom of each drum.
 - (ii) The outer packaging must be filled with the granular thermally insulating fire suppressant where the suppressant is layered between each layer of inner packaging (including the inner packaging of silicone-coated cells or batteries) or each layer of button cells in case of the damaged or defective button cells by at least 1-2 inches of suppressant.
 - (iii) An outer packaging may contain up to nine layers of button cells with each layer of button cells that may not exceed one (1) inch in thickness or 7.5 kg (16.6 pounds) in net weight, whichever is less.
 - (iv) Prior to closing the drum, approximately 2 inches of suppressant must be loose-filled over the last battery or article at the top of each drum.
- (3) Damaged or defective button cells must be packaged in their own metal drums separate from the lithium batteries, batteries of other chemistries, and other articles.
- (4) Outer packagings must meet the Packing Group I performance level.
- (5) Each outer packaging may contain no more than 82 kg (180 pounds) of lithium batteries and batteries of other chemistries.
- (6) 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.

(7) A motor vehicle may transport no more than 96 drums.

c. MARKING:

- (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 21105".
 - (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) Hazard communication statement in approximate proportions: "Contains x % lithium batteries, y % Batteries of other chemistries, and z % mercuric materials" where x, y, and z denote the numerical percentages of each battery (lithium and other type battery) type and mercuric material on the outside of packaging, as applicable.
 - (iv) An emergency response telephone number in case of damage to the packaging or contents.

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 offered or 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 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 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

May 03, 2021

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 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: SH/TG