

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

DOT-SP 16061 (NINTH REVISION)

EXPIRATION DATE: 2028-06-30

(FOR RENEWAL, SEE 49 CFR 107.109)

1. <u>GRANTEE</u>: Cirba Solutions Services US, LLC

Howell, MI

2. PURPOSE AND LIMITATIONS:

- a. This special permit authorizes the manufacture, marking, sale and use of specifically designed packagings for the transportation in commerce of certain batteries and cells when transported for recycling or disposal. This special permit provides no relief from the Hazardous Materials Regulations (HMR) or the International Maritime Dangerous Goods (IMDG) Code 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. In accordance with 49 CFR 107.107(a), party status may not be granted to a manufacturing special permit. These packagings may be used in accordance with 49 CFR 173.22a.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
- 4. <u>REGULATIONS FROM WHICH EXEMPTED</u>: 49 CFR § 172.102(c), Special Provision 130(d) in that batteries utilizing different chemistries (i.e., those battery and cell chemistries specifically covered by another entry in the § 172.101 Hazardous Materials Table) as well as dry batteries may be combined with used or spent batteries and cells in the same package; § 173.159a(c)(2) in that marking the non-spillable battery and outer

Tracking Number: 2021114133

packaging is waived; § 173.185(c)(1)(iii), (c)(1)(iv), (c)(1)(v) and (c)(3) in that alternative marking and documentation are authorized and alternative means of identifying any special procedures to be followed in the event a package is damaged is authorized, as provided herein.

5. <u>BASIS</u>: This special permit is based on the modification application of Cirba Solutions Services US, LLC dated November 2, 2021, February 22, 2023, and May 2, 2023 submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Lithium metal batteries	9	UN3090	N/A
Lithium ion batteries	9	UN3480	N/A
Lithium ion batteries packed with equipment <i>or</i> Lithium ion batteries contained in equipment	9	UN3481	N/A
Lithium metal batteries packed with equipment or Lithium metal batteries contained in equipment	9	UN3091	N/A
Batteries, wet, nonspillable	8	UN2800	N/A
Batteries, nickel metal hydride	9	UN3496	N/A
Batteries, dry, containing potassium hydroxide solid	8	UN3028	N/A
Batteries, dry, sealed, n.o.s.	See Special Provision 130		

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

- a. <u>PACKAGING</u>: The packaging must be in accordance with paragraphs 7.a.(1), 7.a.(2), or 7.a.(3) as prescribed below:
 - (1) Prescribed packagings are UN Standard 4G, 4C1, 4C2, 4D and 4F boxes, or UN specification 1A2 or 1H2 drums (smaller specification boxes or drums are

also authorized) that are capable of withstanding a 1.2 meter drop test in any orientation without:

- (i) Damage to cells or batteries contained in the package;
- (ii) Shifting of the contents that would allow short circuiting; and
- (iii) Release of package contents.

When shipping by cargo vessel, the packaging must conform to the packing group II performance level.

- Lithium ion or lithium metal cells or batteries and equipment containing (2) these cells or batteries with a Watt-hour rating or a lithium content, as applicable, conforming to § 173.185(c)(1)(i), (ii) or (iv): As provided in the packing instructions for thermally insulating fire suppressant (term used in lieu of the registered trade mark) included in the modification application dated February 25, 2019 and on file with the Office of Hazardous Materials Safety (OHMS), the outer packagings must be UN Standard packagings (4G, 4C1, 4C2, 4D, 4F, 1A2, or 1H2) that are capable of meeting a 1.2 meter drop test. Additionally, the outer packaging must be filled with the thermally insulating fire suppressant where the suppressant completely surrounds each cell or battery (including those of all chemistries), or those contained in or packed with equipment by at least 2 inches of suppressant. The thermally insulating fire suppressant must be in a sufficient quantity and placed in a manner to absorb all of the potential release of electrolyte; suppress lithium cell/battery fires, heat and smoke; absorb the smoke, gases and flammable vapors and electrolytes during a thermal runaway incident; and will protect from the effects of shock and vibration and prevent movement of the cells, batteries and/or the equipment.
- (3) Lithium ion batteries with a Watt-hour rating not exceeding 1000 Wh when transported by highway: As provided in the packing instructions for thermally insulating fire suppressant (term used in lieu of the registered trade mark) included in the modification application dated October 25, 2021 and on file with the OHMS, the outer packagings are UN standard (e.g., 1A2, 1H2) packagings that are capable of meeting a 1.2 meter drop test and are filled with at least 3 inches of the thermally insulating fire suppressant in a manner to prevent short circuits, to absorb leaking electrolyte; to suppress lithium battery fires, excessive heat and smoke; and to protect against the effects of shock and vibration and prevent damage resulting from the movement of cells, batteries and or equipment during transport.

b. <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 16061".
 - (ii) As applicable:
 - (A) For packages conforming to the requirements in § 173.185(c)(1)(i) or (ii), the words: "Used Batteries for Recycling or disposal: May Contain Lithium and Nonspillable Batteries. FOR GROUND OR VESSEL TRANSPORT ONLY FORBIDDEN FOR TRANSPORTATION BY AIRCRAFT" in letters at least 12 mm (0.5 inch) in height except that packages with a maximum gross mass of 30 kg (66 pounds) or less may be marked with characters at least 6 mm (0.25 inches) high, and packages with a maximum net mass of 5 kg (11 pounds) or less may be marked in a size appropriate for the size of the package. Additionally, each package must be marked with and an emergency response telephone number accessible 24 hours per day in case of damage to the packaging or contents.
 - (B) For packages conforming to the requirements in § 173.185(c)(1)(iv), the words: "Used Batteries for Recycling or disposal: May Contain Lithium and Nonspillable Batteries. FOR GROUND TRANSPORT ONLY FORBIDDEN FOR TRANSPORTATION BY AIRCRAFT AND VESSEL" in letters at least 12 mm (0.5 inch) in height except that packages with a maximum gross mass of 30 kg (66 pounds) or less may be marked with characters at least 6 mm (0.25 inches) high, and packages with a maximum net mass of 5 kg (11 pounds) or less may be marked in a size appropriate for the size of the package. Additionally, each package must be marked with an emergency response telephone number accessible 24 hours per day in case of damage to the packaging or contents.
 - (C) Marked and labeled in accordance with the requirements in Subparts D and E of Part 172 when the package does not conform to paragraphs 7.b.(1)(ii)(A) or (B) above or to § 173.185(c)(1)(vii).

(2) If the packaging is used to transport non-spillable batteries, the batteries and package are excepted from the marking requirements for non-spillable batteries in § 173.159a(c)(2). All applicable requirements in § 173.159a apply.

8. OPERATIONAL CONTROLS:

- a. Detailed closure, packing, and shipping instructions must be provided to individuals preparing shipments under the terms of the special permit. Persons offering packages for transportation must comply with the closure, packing, and shipping instructions accompanying the packaging. The instructions must at a minimum communicate each requirement of paragraph 8.b. through 8.h. and 9.c. of this special permit.
- b. This packaging is authorized for the purposes of recycling, disposal, reuse, refurbishment, repurposing, or evaluation of cells or batteries.
- c. Non-spillable batteries and nickel metal hydride batteries are limited to 11 kg (25 pounds) or less gross weight each.
- d. Lithium ion, lithium metal, nonspillable batteries and dry cell batteries (nonspillable batteries with a marked rating over 12 volts, dry cell batteries including batteries containing potassium hydroxide and nickel metal hydride batteries with a marked rating over 9 volts) must be protected against short circuits. Some suitable methods of protecting the batteries against short circuits include, but are not limited to, placing the batteries in individual plastic bags; using sufficient quantity of the thermally insulating fire suppressant; or taping and covering the exposed terminals. The means of protection used to prevent short circuits must remain in place while the packages are in transportation.
- e. Equipment containing batteries must be protected against short circuits and unintentional activation.
- f. The gross weight of the package must not exceed 60 kg (133 pounds).
- g. The gross weight of the package may be increased to not more than 400 kg (882 pounds) when packed in accordance with paragraph 7.a.(2) or 7.a.(3), as applicable.
- h. Packages must be stored away from heat.
- i. Packages must be securely closed prior to being offered for transportation.
- j. When utilized as specified in this special permit, the completed package is not subject to 49 CFR Subparts C through H of Part 172 (i.e., shipping papers, marking

labeling, placarding, emergency response information, and training), except as specified herein.

- k. Packages that do not conform to paragraph 7.b.(1)(ii)(A) or (B) above or 8.f. above are subject to 49 CFR Subparts C through H of Part 172 (i.e., shipping papers, marking, labeling, placarding, emergency response information and training), as applicable.
- l. The testing requirements for lithium batteries and cells under § 173.185(a)(1) are waived.

9. SPECIAL PROVISIONS:

- a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.
- b. A person who is not a holder of this special permit, who receives a package covered by this special permit, may offer or reoffer it for transportation provided it is offered or reoffered for transportation in conformance with this special permit and the HMR.
- c. A person offering a package covered by this special permit to a motor carrier must notify the operator of the motor vehicle of the presence of hazardous materials and that in the event of damage, the emergency response number, and emergency procedures applicable to the motor carrier appear on the package.
- d. A current copy of this special permit must be accessible from each facility where the package is offered for transportation (computer generated is acceptable). In addition, a copy of the special permit must be available on the grantees website.
- e. Each packaging manufactured under the authority of this special permit must be either (1) marked with the <u>name of the manufacturer and location (city and state) of the facility at which it is manufactured</u> or (2) marked with a <u>registration symbol</u> designated by the Office of Hazardous Materials Special Permits and Approvals <u>for a specific manufacturing facility.</u>
- f. The grantee must keep on file and make available upon request annual reports from box inspections conducted at locations where batteries are consolidated and/or processed. These reports must include all noted non-compliance with the HMR and/or this special permit and actions taken to prevent recurring of such non-compliance.

- g. A list of companies that have been provided these packagings must be maintained and made available upon request.
- 10. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and cargo vessel. Cargo vessel is authorized only when motor vehicle shipments are not possible, and to and from Alaska, Hawaii, or any other territory or possession of the United States designated by the Secretary.
- 11. <u>MODAL REQUIREMENTS</u>: A current copy of this special permit must be carried aboard each cargo vessel.
- 12. <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 related to packages under paragraph 8.j. must receive adequate instruction on the requirements and conditions of this special permit.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit related to packages under paragraph 8.k. must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

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.

13. <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.:

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 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