September 04, 2019

DOT-SP 16532
(SECOND REVISION)

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. **GRANTEE:** (see individual authorization letter)

2. **PURPOSE AND LIMITATION:**
   a. This special permit authorizes the transportation in commerce of certain damaged, defective, or recalled lithium ion cells and batteries and lithium metal cells and batteries in alternative packaging. 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 the development of this special permit only considered the hazards and risks associated with the 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 more than one lithium cell or battery per package is not authorized, except as specified herein.

5. **BASIS:** This special permit is based on the modification application of EQ Industrial Services, Inc. dated December 27, 2018 submitted in accordance with § 107.105 and the public proceeding thereon and additional information dated April 9, 2019.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<table>
<thead>
<tr>
<th>Hazardous Materials Description</th>
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<tbody>
<tr>
<td><strong>Proper Shipping Name</strong></td>
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<tr>
<td>Lithium ion batteries*</td>
</tr>
<tr>
<td>Lithium ion batteries contained in equipment*</td>
</tr>
<tr>
<td>Lithium ion batteries packed with equipment*</td>
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<tr>
<td>Lithium metal batteries*</td>
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<tr>
<td>Lithium metal batteries contained in equipment*</td>
</tr>
<tr>
<td>Lithium metal batteries packed with equipment*</td>
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*Only damaged, defective, or recalled lithium cells and batteries are authorized under the terms of this special permit.

7. SAFETY CONTROL MEASURES:

a. PACKAGING:

(1) Each damaged, defective, or recalled lithium cell or battery, including those packed with equipment, or each piece of equipment containing such cells or batteries must be individually packed in individual, non-metallic inner packaging that completely encloses the cell, battery, or equipment, as applicable.

(2) Each cell, battery, or equipment inside the inner packaging must be surrounded:

   (i) With non-combustible, non-conductive, and inert absorbent material sufficient to absorb any release of electrolyte; or
(ii) Completely with at least 2 inches of a thermally insulating fire suppressant surrounding each cell, battery, or equipment as described in the April 9, 2019 supplemental information which is on file with the Office of Hazardous Materials Safety Approvals and Permits Division. The thermally insulating fire suppressant must be in a sufficient quantity 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, and that is sufficient to absorb any release of electrolyte.

(3) The inner packaging containing the damaged, defective, or recalled lithium cell or battery or those contained in or packed with equipment must be placed in a 55-gallon, 30-gallon or 5-gallon metal or plastic drum meeting the Packing Group I performance level.

(4) The inner packaging or outer packaging must be leak-proof to prevent the potential release of electrolyte.

(5) Non-combustible, non-conductive, and absorbent cushioning material must fill the void spaces within the outer packaging to protect from the effects of shock and vibration and to prevent movement of the inner packagings containing cells, batteries and equipment, as applicable.

(6) If cells or batteries must comply with paragraph 7.b.(4), a venting device must be used for leaking cells or batteries.

(7) The gross weight of a 55-gallon, 30-gallon or 5-gallon drum may not exceed 181 kg (400 pounds), 91 kg (200 pounds) or 16 kg (35 pounds), respectively.

b. OPERATIONAL CONTROLS:

(1) Each cell and battery must be protected against short-circuiting.
(2) A lithium metal cell or battery individually or contained in equipment in an inner packaging may not exceed 5 g or 25 g in lithium metal content, respectively. Each inner packaging may contain no more than 5 g or 25 g of lithium content for cells or batteries, respectively.

(3) A lithium ion cell or battery individually or contained in equipment in an inner packaging may not exceed 60 Wh or 300 Wh in energy content, respectively. Each inner packaging may contain no more than 60 Wh or 300 Wh of energy content for cells or batteries, respectively.

(4) 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 may not be transported except under paragraph 7.b.(4) of this special permit. The damaged or defective cell or battery may be transported 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.

(5) MARKING: Each package shipped under the terms of this special permit must be durably and legibly marked and displayed on a contrasting background in proximity to the markings and labels required by the HMR with the following:

(i) “DOT-SP 16532”;

(ii) “Damaged/Defective Lithium Ion Batteries” or “Damaged/Defective Lithium Metal Batteries,” as appropriate.

8. SPECIAL PROVISIONS:

a. 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 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 and rail freight.

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. **COMPLIANCE**: 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.

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 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


Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: Steve H