

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

Pipeline and Hazardous Materials Safety Administration

DOT-SP 16371 (FIRST REVISION)

EXPIRATION DATE: 2017-12-31

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. <u>GRANTEE:</u> Volkswagen Group of America (VWGoA) Herndon, VA

2. PURPOSE AND LIMITATION:

- a. This special permit authorizes the transportation in commerce of certain lithium ion batteries each exceeding 35 kg net weight when transported aboard cargo aircraft. This special permit provides no relief from the Hazardous Materials Regulations (HMR) or the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI) 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. No party status will be granted to this special permit.
- d. This special permit serves as an approval under 49 CFR 173.185(b)(5), Packing Instruction 965, Section IA.2. paragraph 3 of the ICAO TI, and Special Provision A99 of the ICAO TI and as a "Competent Authority Approval" as defined under 49 CFR § 107.1.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171- 180 and the ICAO TI.

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- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.102(c)(2), Special Provision A54 in that a lithium battery may not exceed 35 kg when transported by cargo aircraft, except as provided herein.
- 5. BASIS: This special permit is based on the modification application of Volkswagen Group of America (VWGoA) dated April 4, 2016, submitted in accordance with \S 107.105 and the public proceeding thereon.
- 6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Lithium ion batteries*	9	UN3480	N/A

*Only lithium ion batteries identified as VW Part Number 5QE915590XX where XX should be replaced by two alphabetical letters as specified in the modification application dated April 4, 2016 may be offered for and transported under the terms of this special permit.

7. SAFETY CONTROL MEASURES:

a. PACKAGING -

- (1) Each battery having a strong, impact-resistant casing must be completely enclosed as follows:
 - (i) The bottom enclosure consists of a steel plate.
 - (ii) The upper 3 mm aluminum casing is epoxied together with the bottom plate to completely enclose the battery.
 - (iii) The completely enclosed battery serves as the inner packaging.
- (2) The enclosed inner packaging containing the battery must be packaged within a UN 4D wooden box meeting the Packing Group II performance standard.

- (3) The enclosed battery must be securely fastened to the outer box to prevent movement during transportation.
- (4) Lithium ion cells and batteries must be protected against short circuits.
- (5) The net weight of the battery in a package may not exceed 328 kg.
- (6) A maximum of one battery per package is permitted.
- (7) The gross weight of a package may not exceed 426 kg.

b. OPERATIONAL CONTROLS -

- (1) The authorized lithium ion batteries identified as 5QE915590XX (a maximum energy content and voltage of 24.2 kWh and 361 V, respectively) are composed of 264 cells assembled into seventeen (17) large and ten (10) small modules.
- (2) The battery must have a pressure relief vent.
- (3) The battery must be equipped with an effective means to prevent dangerous reverse current flow.
- (4) All batteries must be protected against short-circuiting.
- (5) The state of charge of the battery may not exceed 50% during transportation.
- (6) A maximum of three (3) shipments annually is permitted under the terms of this special permit.

c. TESTING:

- (1) All lithium ion cells must be of a type that have passed all required tests as specified in the "UN Manual of Tests and Criteria, 5th Revised Edition."
- (2) The large and small modules must be of a type that have passed all required tests as specified in the "UN Manual of Tests and Criteria, 5th Revised Edition."

(3) All lithium ion batteries must be of a type that have passed all required tests as specified in the "UN Manual of Tests and Criteria, 5th Revised Edition."

8. SPECIAL PROVISIONS:

- a. Under the terms of this special permit, the grantee may only offer hazardous materials (i.e., the grantee is not authorized as a carrier).
- b. 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, the HMR, and the ICAO TI.
- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- d. This special permit in no way affects the need to obtain any required authorizations from other agencies of the United States Government or from the competent authorities of countries of origin, transit, and destination.
- 9. MODES OF TRANSPORTATION AUTHORIZED: Cargo aircraft only.
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each aircraft used to transport packages covered by this special permit. The shipper must furnish a copy of this special permit to the air carrier before or at the time the shipment is tendered.
- 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 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

Wand By

Acting Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

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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: HWANG