

U.S. Department of Transportation

Research and Special Programs Administration 400 Seventh Street, S.W. Washington, D.C. 20590

## DOT-E 10917 (EXTENSION) SECOND REVISION August 18, 1993

In accordance with 49 CFR 107.105 of the Department of Transportation (DOT) Hazardous Materials Regulations DOT-E 10917 is hereby extended for the party(ies) listed below by changing the expiration date in paragraph 10 to January 31, 1997. This change is effective from the issue date of this extension. All other terms of the exemption remain unchanged.

This extension applies only to party(ies) listed below based on the application(s) received in accordance with 49 CFR 107.105. This extension constitutes a necessary part of this exemption and must be attached to it.

Man I. Roberts Japeth

Associate Administrator for Hazardous Materials Safety

Dist: FHVA FRA USCG FAA

EXEMPTION HOLDER

APPLICATION DATE

FEB 28 1995

(DATE)

ABB Batteries, Inc.
Mississauga, Ontario, CN
(U.S. AGENT: ABB Robotics, Inc.
Rochester Hills, MI)

Ford Motor Company .Dearborn, MI

December 20, 1994

December 20, 1994

## CONTINUATION OF DOT-E 10917 (EXTENSION)

#### ADVISORY

FEB 28 1995

IF YOU ARE A HOLDER OF AN EXEMPTION THAT AUTHORIZES THE USE OF A PACKAGING WITH A MAXIMUM CAPACITY LESS THAN 450 L (119 GALLONS) OR A MAXIMUM NET MASS LESS THAN 400 KG (882 POUNDS), PLEASE BE ADVISED THAT YOUR EXEMPTION MAY NOT BE FENEWED EEYOND SEPTEMBER 30, 1996. IN ADDITION, NO NEW CONSTRUCTION OF PACKAGINGS WHICH FALL WITHIN THE NON-BULK CAPACITIES LISTED ABOVE ARE AUTHORIZED AFTER SEPTEMBER 30, 1994. THIS IS CONSISTENT WITH THE IMPLEMENTATION OF THE NEW PACKAGING REQUIREMENTS ADOPTED UNDER DOCKET HM-181. ANY APPLICATION SUBMITTED TO THIS OFFICE TO RENEW AN EXEMPTION BEYOND THE SEPTEMBER 30, 1996 DATE WILL BE DENIED UNLESS THE APPLICATION CONTAINS SUPPORTING INFORMATION TO JUSTIFY THE CONTINUATION OF THE EXEMPTION.



U.S. Department of Transportation

Research and Special Programs Administration 400 Seventh Street, S.W. Washington, D.C. 20590

# DOT-E-10917 (SECOND REVISION)

Ford Motor Company, Dearborn, Michigan, is hereby granted an exemption from certain provisions of this Department's Hazardous Materials Regulations to offer packages prescribed herein of the hazardous materials described paragraph in 3 below transportation in commerce, subject to the limitations and special requirements specified herein. This exemption authorizes the transportation of cells and batteries containing sodium (liquid or solid) and which may contain sulfur (liquid or solid), and provides no relief from any regulation other than as specifically stated. Each of the following is hereby granted the status of a party to this exemption:

Eagle-Picher Industries, Inc., Joplin, MO - PTE-1
ABB Advanced Battery Systems, Inc., Mississauga, Ontario, CA
 (U.S. Agent: ABB Robins, Inc., Rochester Hills, MI - PTE-2
AEG Corporation, Basking Ridge, NJ - PTE-3
Silent Power, Inc., Wayne, PA - PTE-4
Hughes Aircraft Co., Torrance, CA - PTE-5

2. <u>BASIS</u>. This exemption is based on Ford Motor Company's application dated October 30, 1992, submitted in accordance with 49 CFR 107.103 and the public proceeding thereon. The application granting of party status is based on the following application submitted in accordance with 49 CFR 107.111 and the public proceeding thereon:

Eagle-Picher Industries, Inc.'s application dated March 22, 1993.

ABB Advanced Battery Systems, Inc.'s application dated March 26, 1993.

AEG Corporation's application dated March 31, 1993 and supplemental letter dated May 28, 1993.

Silent Power Incorporated's application dated March 31, 1993. Hughes Aircraft Co.'s application dated April 20, 1993.

- 3. <u>HAZARDOUS MATERIALS (Descriptor and Class)</u>. Cells and batteries containing sodium (liquid or solid) and which may contain sulfur (liquid or solid), classed as Division 4.3 (UN 3292).
- 4. PROPER SHIPPING NAME (49 CFR 172.101). Cells, containing sodium or Batteries, containing sodium, as appropriate.
- 5. <u>REGULATION AFFECTED</u>. 49 CFR 172.101, 172.301, 172.400, 173.212 and 173.213.

- 6. MODES OF TRANSPORTATION AUTHORIZED. Motor vehicle, rail freight, cargo-aircraft only, and cargo-vessel.
- 7. SAFETY CONTROL MEASURES. Packaging prescribed is:
  - a. Cells must be packaged in steel drums (1A2), aluminum drums (1B2), plywood drums (1D), fiber drum (1G), plastic drums (1H2), fiberboard boxes (4G), or wooden boxes (4C, 4D, or 4F), all complying with the requirements for Packing Group II. Cells must be cushioned in the outer packaging so as to prevent contact between cells, between cells and the outer packaging and to ensure that there is no significant movement of the cells during transportation.
  - b. Batteries may be either unpackaged or in non-DOT specification packagings such as fully enclosed or slatted crates.
  - c. Batteries or packagings containing batteries must be marked as required by 49 CFR 172.301(a), (c) and (d).
  - d. Batteries or packagings containing batteries must be labeled with Division 4.3 (DANGEROUS WHEN WET) label on two sides or two ends. Packages containing cells must be labeled with the Division 4.3 (DANGEROUS WHEN WET) label as required by 49 CFR 172.400(a).
  - e. Cells not forming a component of a completed battery may not be offered for transportation, or transported when there is any liquid sodium present in the cell.
  - f. Batteries may not be offered for transportation, or transported by aircraft when there is any liquid sodium present in the battery.
  - g. When loaded in transport vehicles, batteries must be secured so as to prevent significant movement under conditions normally incident to transportation.
  - h. When batteries containing any liquid sodium are offered for transportation, the following additional safety control measures apply:
    - (i) The battery must be equipped with an effective means of preventing external short circuits, such as complete electrical insulation of battery terminals and other external electrical connections. Battery terminals or other electrical connectors penetrating the heat insulation fitted in battery casings must be provided with thermal insulation sufficient to prevent the temperature of the exposed surface from exceeding 55°C (130°F)

- (ii) No battery may be offered for transportation if the temperature at any point on the external surface of the battery casing exceeds 55°C (130°F)
- (iii) If an external source of heating is used during transportation to maintain the sodium in the batteries in a molten state, means must be provided to ensure that the internal temperature of the battery does not exceed 400°C (752°F)
- (iv) When loaded in a transport vehicle:
  - 1. Ventilation and/or separation between batteries must be provided to ensure that the temperature at any point on the surface of the battery casing will not exceed 240°C (464°F) during transportation; and
  - 2. No other hazardous materials, with the exception of cells containing sodium, may be loaded in the same transport vehicle. Batteries must be separated from all other freight by not less than 0.5 meters (1.6 feet)
- i. For purposes of complying with the provisions of 49 CFR 172.600(c), the emergency response information required by Section 172.602(a) must be provided in a manner conforming to Section 172.602(b)(1) and (2), and presented either on the shipping paper or in a separate document. When a separate document is used, that document:
  - 1. Must include the proper shipping name, hazardous class and UN number as authorized for use under paragraphs 3 and 4 of this exemption; and
  - 2. May consist of a copy of the guide page 40 as presented in the current edition of the DOT Emergency Response Guidebook, and to which the information required by paragraph 7.i.1. above, has been added."

## 8. SPECIAL PROVISIONS.

a. Persons who receive packages covered by this exemption may reoffer them for transportation provided no modifications or changes are made to the packages, all terms of this exemption are complied with and a current copy of this exemption is maintained at each facility from which such reoffering occurs.

- b. A copy of this exemption must be carried aboard each aircraft, cargo vessel, or motor vehicle used to transport packages covered by this exemption. In accordance with the provisions of 49 CFR Part 107, Appendix B to Subpart B, paragraph 3, the shipper shall furnish a copy of this exemption to the air carrier before or at the time the shipment is tendered.
- c. Drivers of vehicles tansporting batteries containing any quantity of liquid sodium must have been instructed as to necessary safeguards and proper procedures in the event of unusual delay, fire or accident.
- d. The outside of each battery or packagings containing a battery or cells must be plainly and durably marked "DOT-E.10917."
- e. Shippers using the packaging covered by this exemption must comply with the shipping papier, marking, labeling, and placarding requirements of 49 CFR Part 172; all provisions of this exemption, and all other applicable requirements contained in 49 CFR Parts 100 through 180.
- 9. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (49 CFR 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must also inform the AAHMS, in writing, as soon as practicable of any incidents involving the package and shipments made under this exemption.
- 10. EXPIRATION DATE. February 28, 1995.

Issued at Washington, D.C.

Alan I. Roberts

Associate Administration

for Hazardous Materials Safety

AUG 1 8 1993

(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.
Attention: Exemptions Program.

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Dist: FHWA, FRA, FAA.