U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety Administration**

East Building, PHH – 32
1200 New Jersey Avenue, Southeast
Washington, D.C. 20590

APPROVAL 2008120009
THIRD REVISION
ISSUED BY THE COMPETENT AUTHORITY OF THE UNITED STATES
EXPIRATION DATE: February 28, 2014

1. **APPROVAL HOLDER:** Members of the Council on Safe Transportation of Hazardous Articles, Inc. (COSTHA) as individual grantees on file with the Office of Hazardous Materials Special Permits and Approvals Fairfax Station VA 22039

2. **REGULATORY AUTHORITY:** 49 CFR 173.185(f) and 173.220(d).

3. **SYNOPSIS:** Members of the Council on Safe Transportation of Hazardous Articles, Inc. (COSTHA) are authorized to offer for transportation prototype large format lithium ion battery assemblies installed in vehicles for development testing. The battery assembly consists of multiple units of battery modules. Each module is constructed from multiple units of lithium ion cells which meet the UN test requirements for Class 9 lithium ion batteries. The modules and assemblies have not been tested in accordance with UN lithium battery test requirements but are capable of meeting similar test requirement.

4. **BASIS:** This approval is issued in response to the Council on Safe Transportation of Hazardous Articles, Inc.'s (COSTHA) original application dated November 26, 2008 and additional information dated Feb. 17, 2009.

5. **PERIOD OF VALIDITY AND CONDITIONS OF APPROVAL:** This approval does not provide relief from any requirements of the Hazardous Materials Regulations except as stated herein. This approval is valid until the posted expiration date or until terminated by the Associate Administrator for Hazardous Materials Safety.

a. Approved Materials: Only the following material(s) may be transported under the terms of this approval.

Hazardous Materials Description			
Proper shipping names	Hazard Class or Division	Identification Number	Packing Group
Vehicle, flammable gas powered *or* Vehicle, flammable liquid powered	9	UN3166	
Battery powered vehicle	9	UN3171	

b. Safety Controls: Battery modules/assemblies are equipped with a system capable of monitoring the assemblies to prevent external short-circuit, overcharge between batteries in the assembly, and overheating and overcharging of the battery assembly. Only prototype and low production (less than 100 units assembled annually) lithium ion battery assemblies batteries are authorized to be transported under the terms of this approval.

(1) All cells used in the battery and assembly shall pass all required tests as specified in the UN Manual of Tests and Criteria.

(2) The size of the completed battery assemblies range from 10 Kg to 659 Kg (1,000 Wh. to 40,000 Wh.)

(3) The battery assembly shall be constructed to industry specifications to meet the FMVSS Test 305 vibration and shock tests. These tests are comparable to the UN vibration and shock tests.

(4) The battery assembly shall be installed in a vehicle for shipment.

c. Marking Requirements: Marking with the approval number is not required.

6. **MODES OF TRANSPORTATION AUTHORIZED**: Motor vehicle, rail freight and cargo vessel.

7. **SPECIAL PROVISIONS:**

a. A current copy of this approval must be maintained and made available for examination at each location where materials are packaged and offered for transportation.

b. Any person who offers for transportation or transports the above-described package(s) may do so under the authority of this approval if all requirements and conditions of this approval are met.

c. Any person who receives a package covered by this approval may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this approval.

d. Members of COSTHA utilizing this approval must be on file with the Office of Hazardous Materials, Office of Special Permits and Approvals.

e. Shipments or operations conducted under this Approval are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR 171.15 – Immediate notice of certain hazardous materials incidents, and 49 CFR 171.16 – Detailed hazardous materials incident reports. In addition, the holder of this Approval must notify the Associate Administrator for Hazardous Materials Safety – OHMSPA, in writing, of any incident involving a package, shipment, or operation conducted under the terms of this Approval.

8. **GENERAL PROVISIONS:**

a. Failure by any person to comply with the terms and conditions of this approval and the Hazardous Materials Regulations, 49 CFR Parts 171-180 may result in the modification, suspension or termination of that person's authority to use this approval. Failure to comply may also subject that person to penalties prescribed by 49 U.S.C. §§ 5123 and 5124. This approval may be modified, suspended or terminated in its entirety if that action is justified in light of changes in circumstances or additional information not available when this approval was issued. Unless immediate modification, suspension or termination is necessary to avoid a risk of significant harm to persons or

property, before action is taken, that person will be notified and provided with an opportunity to show why the proposed action should not be taken.

b. Each "Hazmat employee", as defined in 49 CFR 171.8, who performs a function subject to this approval must be provided training on the requirements and conditions of this approval in addition to the training required by §§ 172.700 through 172.704.

c. Any person operating under the terms of this approval must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
Issued in Washington, D.C.

Dated: 01/15/2010

For Dr. Magdy El-Sibaie
Acting Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.