1. **GRANTEE:** Sandia National Laboratories
   Livermore, CA

2. **PURPOSE AND LIMITATION:**
   
   a. This special permit authorizes the transportation in commerce of a PG III flammable liquid in alternative packaging (a Neutron Scatter Camera) by motor vehicle and cargo vessel. 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 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 use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.

   c. No party status will be granted to this special permit.

3. **REGULATORY SYSTEM AFFECTED:** 49 CFR Parts 106, 107 and 171-180.

4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR §§ 173.242 in that alternative packaging is authorized and 172.302(c) in that the marking requirements are waived.

5. **BASIS:** This special permit is based on the application of Sandia National Laboratories dated May 13, 2009 submitted in accordance with § 107.109.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<table>
<thead>
<tr>
<th>Hazardous Materials Description</th>
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<tr>
<td>Proper shipping name</td>
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<tr>
<td>Flammable liquid, n.o.s. (xylenes)</td>
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7. SAFETY CONTROL MEASURES:

a. PACKAGING - The prescribed packaging system is as follows:

(1) An outer packaging consisting of a U.S. DOT Type A container manufactured by Container Products Corporation, Wilmington, NC. The packing is constructed of aluminum, has a removable lid with D-rings for lid lift only, “T” bolt closure system; maximum payload is 1,500 lbs; empty weight is 400 lbs. Container dimensions are 60“ x 36“ x 44“. Sufficient vermiculite must be added to the packaging to absorb twice the volume of liquid being transported. The container is modified with an electrical pass through port to enable the ship’s electrical system to be used to power the optical sensors within the container.

(2) The outer packaging encloses fifteen inner receptacles as follows:

(i) eight (8) aluminum reservoirs containing 0.6 liters of hazardous material. The reservoirs are hollow and sealed on one end with a glass viewing window securely sealed to an aluminum flange with an o-ring gasket.

(ii) seven (7) reservoirs containing 1.5 liters of hazardous material. The reservoirs are hollow and sealed on one end with a glass viewing window securely sealed to an aluminum flange with an o-ring gasket.
(3) The inner receptacles are firmly attached to a metal rack of approximate dimensions of 5’x 2’x 2’ which is placed inside the DOT Type A container.

(4) The outer container lid will be modified to allow electrical power cables to penetrate the container boundaries and drive the optical-electronic sensors housed alongside the reservoirs. The modification to the lid requires welding an electrical feed through plate with ¾ inch diameter rubber gasket o-rings sealing around each of the 30 double sided couplers.

b. OPERATIONAL CONTROLS —

(1) The container (Neutron Scatter Camera) described in paragraph 7.a. must be placed upright within a closed intermodal freight container and firmly secured to the floor boards via ratcheting, tie-down straps, or cables. When transported by cargo vessel, the intermodal freight container must be stowed on “on deck”.

(2) The bulk container lid is modified to allow electrical power cables to penetrate the container boundaries and drive the optical-electronic sensors housed alongside the reservoirs. The modification to the lid is accomplished by welding an electrical feed through plate with ¾ inch diameter rubber gasket o-rings sealing around each of the 30 double sided couplers.

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 modifications or changes are 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.

c. MARKING — The marking requirements of § 172.302(c) are waived.
d. The alternative packaging authorized by this special permit may only be used in support of Department of Homeland Security programs.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and cargo vessel.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel or 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.

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.:

[Signature]

Diane LaValle
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: DB/AM