1. **GRANTEE:** LND Incorporated  
   Oceanside, NY

2. **PURPOSE AND LIMITATIONS:**
   
a. This special permit authorizes the manufacture, marking, sale and use of the non-DOT specification packagings described in paragraph 7 below for use in the transportation in commerce of the materials authorized by this special permit. 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 consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.

c. In accordance with 49 CFR 107.107(a) party status may not be granted to a manufacturing permit. These packagings may be used in accordance with 49 CFR 173.22a.

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

4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR §§173.302a in that non-DOT specification pressure vessels are not authorized except as specified herein.

5. **BASIS:** This special permit is based on the application of LND, Incorporated dated January 14, 2022, submitted in accordance with §107.109.
6. **HAZARDOUS MATERIALS (49 CFR § 172.101):**

<table>
<thead>
<tr>
<th>Hazardous Material Description</th>
<th>Hazard Class/Division</th>
<th>Identification Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argon, compressed</td>
<td>2.2</td>
<td>UN1006</td>
<td>N/A</td>
</tr>
<tr>
<td>Carbon dioxide, compressed</td>
<td>2.2</td>
<td>UN1013</td>
<td>N/A</td>
</tr>
<tr>
<td>Compressed gas, n.o.s. (mixtures of the gases listed)</td>
<td>2.2</td>
<td>UN1956</td>
<td>N/A</td>
</tr>
<tr>
<td>Compressed gas, flammable, n.o.s. (mixtures of Hydrogen, compressed and any of the gases listed)</td>
<td>2.1</td>
<td>UN1954</td>
<td>N/A</td>
</tr>
<tr>
<td>Helium, compressed</td>
<td>2.2</td>
<td>UN1046</td>
<td>N/A</td>
</tr>
<tr>
<td>Krypton, compressed</td>
<td>2.2</td>
<td>UN1056</td>
<td>N/A</td>
</tr>
<tr>
<td>Neon, compressed</td>
<td>2.2</td>
<td>UN1065</td>
<td>N/A</td>
</tr>
<tr>
<td>Nitrogen, compressed</td>
<td>2.2</td>
<td>UN1066</td>
<td>N/A</td>
</tr>
<tr>
<td>Xenon, compressed</td>
<td>2.2</td>
<td>UN2036</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7. **SAFETY CONTROL MEASURES:**

   a. **PACKAGING:** Packagings prescribed are non-DOT specification, metal, single trip, inside containers, described as hermetically sealed electron tube radiation sensors. Each radiation sensor must be shipped in a strong outside packaging capable of withstanding a minimum drop test of six feet without breakage of the radiation sensor or rupture of the outside packaging. The design burst pressure of the radiation sensor must be at least 5 times the design pressure. Each radiation sensor must conform to one of the following:

   1. A radiation sensor of approximately 5 inches in diameter, with a volume of 122 cubic inches water capacity, and a maximum working pressure of 172 psig. Each radiation sensor must be designed and constructed in accordance with LND Incorporated Drawing Number 2-050916-00 on file with the Office of Hazardous Materials Safety Permits and Approvals Division (OHMSAPD). The radiation sensor must be shipped in a strong outside packaging conforming to LND Incorporated Drawing Number 2-296-0030-00.

Tracking Number: 2022014765
(2) A cylindrical radiation sensor of approximately 7 inches in diameter, with a volume of 517 cubic inches maximum water capacity, and a maximum working pressure of 426 psig. Each radiation sensor must be designed and constructed in accordance with LND Incorporated Drawing Number 2-499-0001-00 and shipped in a shipping container conforming to Drawing Number 1-296-0035-00 on file with the OHMSAPD.

(3) A spherical radiation sensor of approximately 10 inches in diameter, with a volume of 487 cubic inches maximum water capacity and a maximum working pressure of 353 psig. Each sensor must be designed and constructed in accordance with LND Incorporated Drawing Number 2-499-0002-00 and shipped in a shipping container conforming to Drawing Number 1-296-0037-00, on file with OHMSAPD.

b. **OPERATIONAL CONTROLS:**

(1) Division 2.1 materials are only authorized for transportation in radiation sensor must be designed and constructed in accordance with LND Incorporated Drawing Number 2-499-0001-00 and shipped in a shipping container conforming to Drawing Number 1-296-0035-00 on file with the OHMSAPD.

(2) If repackaged, packagings used to ship larger equipment containing radiation sensors covered by this special permit must be strong outside packagings providing equivalent protection for the devices as specified in paragraph 7.a. above.

8. **SPECIAL PROVISIONS:**

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. A person who is not a holder of this special permit, but 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 offered for transportation in conformance with this special permit and the HMR.

c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Safety Permits and Approvals Division for a specific manufacturing facility.
e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.

f. Transportation of Division 2.1 (flammable gases) are not authorized aboard aircraft unless specifically authorized in the Hazardous Materials Table (49 CFR 172.101).

9. **MODES OF TRANSPORTATION AUTHORIZED**: Motor vehicle, rail freight, cargo vessel, cargo aircraft only, and passenger-carrying aircraft.

10. **MODAL REQUIREMENTS**: A current copy of this special permit must be carried aboard each cargo vessel, aircraft or motor vehicle used to transport packages covered by this special permit. The shipper must furnish a current copy of this special permit to the air carrier before or at the time the shipment is tendered.

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 at Washington, D.C.:

[Signature]

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 https://www.phmsa.dot.gov/approvals-and-permits/hazmat/special-permits-search. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: CWFreeman/nw/kah