1. **GRANTEE:** J.L. Shepherd & Associates  
   San Fernando, CA

2. **PURPOSE AND LIMITATION:**
   
a. This exemption authorizes a one-time transportation in commerce of a Type B quantity of radioactive material, approximately 600 Curies of Cs-137, in a packaging, an irradiator, that has not fully proven its ability to comply with the performance requirements for a Type B radioactive material packaging. Under the provisions of this exemption, the package is considered a "Type B" package and is approved for domestic transport. This exemption provides no relief from any Hazardous Materials Regulation (HMR) other than as specifically stated herein.

b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

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

4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR § 173.403 in that this "Type B package" may not meet all the conditions set forth in 10 CFR Part 71. 49 CFR § 173.413 in that this package may not be designed and constructed to meet all the applicable requirements specified in 10 CFR Part 71. 49 CFR § 173.416 in that this package is not listed as an authorized Type B package. 49 CFR § 173.467 in that this package may not meet all the test requirements prescribed in 10 CFR Part 71 for ability to withstand accident conditions in transportation.

**EXPIRATION DATE:** November 30, 2001
5. **BASIS:** This exemption is based on the application of J.L. Shepherd & Associates dated April 21, 1999, submitted in accordance with § 107.105 and the public proceeding thereon.

6. **HAZARDOUS MATERIALS (49 CFR § 172.101):**

<table>
<thead>
<tr>
<th>Hazardous materials description -- proper shipping name</th>
<th>Hazard Class/Division</th>
<th>Identification Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radioactive material, n.o.s.</td>
<td>Class 7</td>
<td>UN 2982</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7. **SAFETY CONTROL MEASURES:**

   a. J.L Shepherd and Associates will prepare the package, which is located at Utah State University in Logan, Ut, for transport in accordance with their exemption application.

   b. J.L. Shepherd and Associates will transport the "Type B" package to their facility in San Fernando, CA under the exclusive use provisions defined in 49 CFR § 173.403.

   c. The shipment will be escorted by a J.L. Shepherd employee trained in radiation protection and equipped with all necessary radiation monitoring instruments.

8. **SPECIAL PROVISIONS:**

   a. State radiation authorities along the selected route shall be notified of the proposed shipment and provided a copy of this exemption at least seven (7) days in advance of the scheduled transport.

   b. A copy of this exemption must be attached to the shipping papers required for transport of this package.

9. **MODES OF TRANSPORTATION AUTHORIZED:** Motor vehicle.

10. **MODAL REQUIREMENTS:** None as a requirement of this exemption.
11. **COMPLIANCE:** Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 *et seq*:

- All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.

- Registration required by § 107.601 *et seq.*, when applicable.

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

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. **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. (Sections 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 inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued at Washington, D.C.:

Alan I. Roberts  
Associate Administrator for Hazardous Materials Safety  

DEC 17 1999  
(DATE)
Continuation DOT-E 12258

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

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, Washington, DC 20590-0001, Attention: Docket Section, 202-366-5046.

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