1. **GRANTEE:** Spellman High Voltage Electronics Corp.  
   Valhalla, NY

2. **PURPOSE AND LIMITATIONS:**

   a. This special permit authorizes the manufacture, marking, sale, and use of the packaging described in paragraph 7 below for use in the transportation of sulfur hexafluoride. 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.

   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 packaging is not authorized, except as specified herein.

5. **BASIS:** This special permit is based on Spellman High Voltage Electronics Corp’s application dated March 10, 2022, 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</th>
<th>Hazard Class/Division</th>
<th>Identification Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfur hexafluoride</td>
<td>2.2</td>
<td>UN1080</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7. SAFETY CONTROL MEASURES:

a. PACKAGING: Prescribed packaging is Lorad Corporation’s industrial X-ray instrumentation, consisting of a cathode ray (X-Ray) tube and other instrumentation assembled as follows:

(1) In a 6063-T6 or 6061-T6 schedule 5 aluminum alloy container with an outside diameter of 6.625 inches with a wall thickness of 0.109 inch with bolted end plates, filled with sulfur hexafluoride gas; or

(2) In a 6061-T6 container with an outside diameter of 8.0 or 11.75 inches with a wall thickness of 0.125 inch with bolted end plates, filled with sulfur hexafluoride gas.

The assembly has: Lorad Corporation's Finished Part Number P/N 3-000-0736, P/N 3-000-0768, P/N 3-000-0772, P/N 3-000-0776, P/N 3-000-0781, or P/N ASY-00517, National Stock Number 6635-01-344-6403, P/N 409390-001 and all equivalent models of the LPX-160 Series and SPX160ACDBM, with an outside diameter of 6.625 inches; Lorad Corporation’s Finished Part Number P/N 3-000-3071, P/N 3-000-3072, or P/N 3-000-3073 and all equivalent models of the LPX-200 Series, with an outside diameter of 8.0 inches; and Lorad Corporation’s Finished Part Number P/N 3-000-3191 and all equivalent models of the LPX-300 Series, with an outside diameter of 11.75 inches associated drawings and other information on file with the Office of Hazardous Materials Approvals and Permits Division (OHMSAPD).

b. OPERATIONAL CONTROLS:

(1) Each container must be capable of withstanding a burst pressure of not less than 600 psig.

(2) Each container, with end plates assembled in place and prior to cathode-ray unit assembly, must be pressure tested to at least 300 psig.

(3) No unit may be charged with sulfur hexafluoride to a pressure exceeding 50 psig at 70 °F. Each unit must be equipped with a safety relief device designed to function at 85 psig.
(4) Each unit must be checked for leaks prior to shipment.

(5) When over packed as follows, the X-ray instrumentation units are exempt from labeling, except when offered for transportation by air:

(i) In a strong wooden package as shown in Spellman’s drawing numbers 2-125-0012, Rev. 001 (LPX-160/200 ASSY, XRAY TBHD CRATE), 2-126-0016, Rev. A (LPX-160/200 ASSY, SYSTEM CRATE), 2-125-0069, Rev. B (LPX 300 ASSY, SYSTEM CRATE), or 408321-001, Rev. B (LPX-300 A/C SYSTEM) and on file with OHMSAPD; or

(ii) In a ruggedized style "T" transit container conforming to MIL-T-28800 and as shown on Lorad's drawing # 2-630-0025 dated February 16, 1996, on file with OHMSAPD. The transit cases will be further packaged in a master carton and skid per Lorad's drawing 2-630-0030 dated February 16, 1996, on file with OHMSAPD.

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 Special Permits and Approvals 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.

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 or aircraft 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:

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

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: ae/kah

Tracking Number: 2022034342