

June 2, 2006



U.S. Department  
of Transportation

400 Seventh Street, S.W.  
Washington, D.C. 20590

**Pipeline and  
Hazardous Materials  
Safety Administration**

DOT-SP 12874  
(THIRD REVISION)

EXPIRATION DATE: May 31, 2010

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Zomeworks Corporation  
Albuquerque, MN
2. PURPOSE AND LIMITATION:
  - a. This special permit authorizes the transportation in commerce of a machine component containing certain Division 2.2 materials in a manner consistent with the provisions for refrigerating machines and not subject to the Hazardous Materials Regulations (HMR) except as provided in this special permit.
  - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
  - c. Party status will not 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 Parts 171 - 180, except as provided in this special permit.
5. BASIS: This special permit is based on the application of Zomeworks Corporation dated April 18, 2006, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<b>Hazardous Materials Description</b>			
<b>Proper Shipping Name</b>	<b>Hazard Class/ Division</b>	<b>Identification Number</b>	<b>Packing Group</b>
Chlorodifluoromethane or Refrigerant gas R22	2.2	UN1018	N/A
Chlorodifluoromethane or Refrigerant gas R410A	2.2	UN3163	N/A
1,1,1,2 tetrafluoroethane or Refrigerant gas R 134a	2.2	UN3159	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a machine component charged with a nonflammable, non-toxic refrigerant gas considered a "refrigerating machine" as defined in the HMR by § 173.307(a) (4). Refrigerating machines authorized under this special permit, when conforming to the following and other provisions of this special permit, are not otherwise subject to the HMR. The packaging meets the following requirements:

(1) The refrigerating machine consists of two canisters connected by a length of copper tubing as follows:

(i) Each canister must be fabricated from a section of steel tubing with a internal volume of not more than 500 cubic inches and with a nominal wall thickness of not less than .083 inches, and which is capped by not less than 12 gauge steel caps continuously welded to the canister.

(ii) Canisters are connected by a section of 1/4 inch nominal copper tubing not more than 200 inches in length, silver soldered into the canister.

(iii) One canister is fitted with a copper tubing fill line silver soldered into a hole in the canister and tightly closed by crimping and silver

**June 2, 2006**

soldering and that canister or the other canister may be fitted with a heat transfer fin connected to the canister by copper tubing silver soldered into holes in one of the canisters.

(iv) In addition, one canister will be fitted with a fusible pressure relief device with a melting point not exceeding 230°C.

(2) The refrigerating machine is charged with not more than 12 kg of one of the authorized non-flammable, non-toxic refrigerant gases such that:

(i) The gauge pressure of the refrigerant gas in the machine component does not exceed 21 bar (305 psig) at 55°C; and

(ii) The liquid phase of the refrigerant does not completely fill the machine component at a temperature of 55°C.

(3) The burst pressure of the canisters is not less than 5 times the charge pressure of the component at a temperature of 55°C.

(4) The refrigerating machine is placed in a specially designed strong outer packaging in such a manner as to provide protection to the component, and prevent excessive movement that could damage the component or cause leaks under conditions normally incident to transportation.

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 modification or change is made to the package or its contents 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. The marking requirements of §§ 172.203(a) and 172.301(c) are waived.

**June 2, 2006**

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only, and passenger-carrying aircraft.
10. MODAL REQUIREMENTS: No modal-specific requirements apply to 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

**June 2, 2006**

materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety -- OHMSPA, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

A handwritten signature in blue ink, appearing to read "R. Ryan Taylor".

for Robert A. McGuire  
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.

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](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