



U.S. Department  
of Transportation

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

**Research and  
Special Programs  
Administration**

**SEP 22 2004**

DOT-E 11406  
(SIXTH REVISION)

EXPIRATION DATE: March 31, 2006

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Shippers and carriers of liquid or solid waste (henceforth called "waste") with low levels of external radiation who are approved by state radioactive material control officials registered with the Office of the Executive Director of the Conference of Radiation Control Program Directors (CRCPD), Frankfort, Kentucky.
  
2. PURPOSE AND LIMITATION:
  - a. This exemption authorizes the one-way transportation in commerce by highway or rail of shipments of waste which have been found, during or at the conclusion of transportation or during inspection of the shipment following its receipt, to contain unexpected and unidentified radioactive material or contamination. The one-way transportation authorized by this exemption is exempted from the classification, packaging, and hazard communication requirements normally required for transportation of radioactive material.  
  
The purpose of the transportation authorized by this exemption is to allow the waste to be moved to a location deemed by the authorizing state official to be more appropriate for proper characterization and/or disposition of the discovered radioactivity. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
  
  - b. The safety analysis performed in the 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.

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4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR Part 172, Subparts C, D, E, F, G, and H as they pertain to required shipping papers, package marking and labeling, placarding, emergency response information, and training; Part 173, Subpart B, § 173.22(a)(1) as it pertains to classification of hazardous materials; Part 173, Subpart I as it pertains to packaging and transport of radioactive material; Part 174, Subpart K as it pertains to detailed requirements for rail freight transport of radioactive materials; and Section 177.842 as it pertains to highway transport of radioactive materials.
5. BASIS: This exemption is based on CRCPD's application dated March 25, 2004, submitted in accordance with § 107.109 and additional information dated July 12, 2004.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<b>Proper Shipping Name/ Hazardous Materials Description</b>	<b>Hazard Class/ Division</b>	<b>Identi- fication Number</b>	<b>Packing Group</b>
Radioactive material, excepted package-limited quantity of material	7	UN2910	N/A
Radioactive Material, Type A package <i>non-special form, non fissile or fissile-excepted</i>	7	UN2915	N/A
Radioactive Material, Type A package, special form <i>non fissile or fissile-excepted</i>	7	UN3332	N/A
Radioactive Material, Type B(U) package <i>non fissile or fissile-excepted</i>	7	UN2916	N/A
Radioactive Material, low specific activity (LSA-I) <i>non fissile or fissile-excepted</i>	7	UN2912	N/A
Radioactive Material, low specific activity (LSA-II) <i>non fissile or fissile-excepted</i>	7	UN2921	N/A
Radioactive Material, low specific activity (LSA-III) <i>non fissile or fissile-excepted</i>	7	UN3322	N/A
Radioactive Material, surface contaminated objects (SCO-I or SCO-II) <i>non fissile or fissile-excepted</i>	7	UN 2913	N/A

7. SAFETY CONTROL MEASURES:

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a. PACKAGING - The shipments are excepted from the packaging and transport requirements for radioactive material of Part 173, Subpart I and may be transported by motor vehicle or rail freight provided it is evident that radioactive material will not be released from the conveyance during transit and that the transport conditions in the shipment approval form specified in paragraph 7(d) of this exemption are satisfied.

b. CLASSIFICATION AND TESTING - The shipments are exempted from the classification and description requirement of 49 CFR § 173.22(a)(1) provided that the measured radiation levels at the external surface of the conveyance do not exceed 0.50 mSv/h (50 mrem/h).

c. COMMUNICATIONS - The packages and conveyances transported under this exemption are exempted from the communication requirements of 49 CFR Part 172, Subpart C (shipping papers), D (marking), E (labeling), and F (placarding) provided the communication provisions in the shipment approval form specified in paragraph 7(d) of this exemption are satisfied.

d. SHIPMENT APPROVAL BY STATE RADIATION OFFICIAL - Prior to shipment of the waste, the state radiation control official of the state where the radiation was detected must evaluate the radiological risk associated with the transport of the material, under the conditions of this exemption, to a location where the radioactive material can be identified and properly treated. If the official believes that these risks are no greater than the risk associated with normal transport of radioactive material in compliance with the regulations, he/she may authorize the shipment by completing and signing the shipment approval form shown in Annex A. Any additional or special conditions necessary for safe transport must be included in the approval.

e. SHIPMENT APPROVAL FORM DISTRIBUTION - Copies of the shipment approval form must be provided, in advance of the shipment, by the issuing official to the following:

(1) the Office of the Executive Director, CRCPD, Frankfort, KY;

(2) the cognizant person at the facility where the radioactive material was discovered;

(3) the cognizant person at the facility from which the waste was shipped prior to detection;

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(4) the cognizant person at the facility to which the waste will be shipped for identification and/or treatment;

(5) the state radiation official having authority over the facility receiving the shipment (after detection);

(6) the state radiation official having authority over the facility or company from which the shipment originated (before detection).

f. SHIPMENT APPROVAL FOR CARRIERS - The cognizant person at the facility where the radioactive material was discovered must provide a copy of the shipment approval to the operator of the vehicle used for highway shipments and to the railroad management or dispatch office for rail freight shipments.

g. IDENTIFICATION AND DISPOSITION OF RADIOACTIVE MATERIAL TRANSPORTED UNDER THIS EXEMPTION - Once the radionuclides in the waste are identified and disposition is arranged, the person responsible for the identification must complete the identification and disposition portion of the shipment approval form and provide the completed form to:

(1) the Office of the Executive Director, CRCPD;

(2) the state official at the state of origin (prior to detection);

(3) the state official issuing the shipment approval;  
and

(4) the state official of the state where identification and disposition occurred, if different from g(2).

8. SPECIAL PROVISIONS:

a. Shipment Approval Assigned Number - One official in each state must assign and maintain a list of shipment approval numbers for all shipment approvals issued by that state under DOT-E 11406. The eight figures in the shipment approval number should be determined as follows: the first two characters are the abbreviation of the state of origin; the third and fourth characters must be the abbreviation of the state of destination; the fifth and sixth characters must be the last two digits of the year of issue; the seventh and

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eighth characters must be the sequential number of the shipment approved for that year between those states. For example PA-NJ-00-02 would be the second shipment from Pennsylvania to New Jersey that was approved by the official during 2000.

b. Each state radioactive material official approving shipments must have a copy of this exemption and a copy of Title 49 of the Code of Federal Regulations. This official should also provide a copy of this exemption and their implementing instructions to all managers of landfill, incineration or other waste processing facilities that have installed radiation monitoring systems within the state.

9. MODES OF TRANSPORTATION AUTHORIZED: Rail freight and motor vehicle.

10. MODAL REQUIREMENTS:

a. A current copy of the shipment approval document must be carried in the cab of the motor vehicle. For shipments by rail freight, the railroad management will provide train crews with the identity of the rail car and its position in the train.

b. Each carrier must ensure that the shipment described on the shipment approval document is transported over the most appropriate route without unnecessary or avoidable delay.

c. The shipment approval form and other provisions of this exemption satisfy: the Emergency Information and Training requirements of 49 CFR Part 172, Subpart G and Subpart H, and the modal Class 7 material requirements of Part 174, Subpart K and Part 177, Subpart B.

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:

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

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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: In addition to the reporting requirements of §§ 171.15, 171.16, and 174.750 or 177.854, a carrier must report, as soon as practicable, any incident involving a shipment in transportation under this exemption to the Associate Administrator for Hazardous Materials Safety by calling the National Response Center at 1-(800)424-8802. A call must also be made to the state official signing the shipment approval as identified in paragraph 7(d). These telephonic notices should identify that the shipment is under DOT-E 11406 and the eight-digit shipment approval identification number.

Issued in Washington, D.C.:



Robert A. McGuire  
fa Associate Administrator for  
Hazardous Materials Safety

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(DATE)

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.

Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at <http://hazmat.dot.gov/exemptions> Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: Boyle/sln

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Approval No \_\_\_\_\_ (Refer to E 11406, para. 8a)

This shipment of waste or recycle materials contains unidentified radioactive material causing low level radiation outside the vehicle. Shipment is under Exemption DOT-E 11406 without a determination of materials meeting or not meeting the regulatory definition of radioactive material. The shipment is a minor radiological concern based on considerations of the U.S. Dept. of Transportation and the state official signing this shipment approval document.

DETAILS of DETECTION SITE, MATERIALS, and ORIGIN

Facility: Name \_\_\_\_\_ Type: \_\_\_\_\_

Address: \_\_\_\_\_

① Contact person: \_\_\_\_\_ Ph. \_\_\_\_\_ Fax. \_\_\_\_\_

Highway or  Rail Vehicle Type: \_\_\_\_\_ Id.No.: \_\_\_\_\_

Company: \_\_\_\_\_ Operator name: \_\_\_\_\_

② Contact person: \_\_\_\_\_ Ph. \_\_\_\_\_ Fax. \_\_\_\_\_

Description of waste and release risk factors: \_\_\_\_\_

Radiation Measurement Date/time performed: \_\_\_\_\_

mrem/h (max) \_\_\_\_\_ location on vehicle \_\_\_\_\_

Inst.Mfgr./type/model \_\_\_\_\_ Bkg. mrem/h \_\_\_\_\_

Surveyor name: \_\_\_\_\_ Ph. \_\_\_\_\_

Shipment Origin Company: \_\_\_\_\_ Address: \_\_\_\_\_

Waste Origin: \_\_\_\_\_

③ Contact person: \_\_\_\_\_ Ph. \_\_\_\_\_ Fax. \_\_\_\_\_

RADIATION CONTROL OFFICIALS (Detection, Origin, Destination States)

Detection State Official (receiving radiation detection info) Name: \_\_\_\_\_

④ Organization \_\_\_\_\_ Ph. \_\_\_\_\_ Fax. \_\_\_\_\_

Origin State Official (prior to detection) Name: \_\_\_\_\_

⑤ Organization \_\_\_\_\_ Ph. \_\_\_\_\_ Fax. \_\_\_\_\_

Destination State Official (after detection) Name: \_\_\_\_\_

⑥ Organization \_\_\_\_\_ Ph. \_\_\_\_\_ Fax. \_\_\_\_\_

DESTINATION for RADIOACTIVE MATERIAL IDENTIFICATION and/or DISPOSITION

If carrier and shipper to this location are different than ② and ③, show info in REMARKS

Company Name: \_\_\_\_\_ Location: \_\_\_\_\_

⑦ Contact person: \_\_\_\_\_ Ph. \_\_\_\_\_ Fax. \_\_\_\_\_

E 11406 Approval No \_\_\_\_\_

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APPROVAL of SHIPMENT and SPECIAL CONDITIONS

Conditions: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

⑧ Signature: \_\_\_\_\_ Ph. \_\_\_\_\_ Fax. \_\_\_\_\_

Title \_\_\_\_\_ Organization \_\_\_\_\_ Date \_\_\_\_\_

IDENTIFICATION of RADIOACTIVE MATERIAL and DISPOSITION INFORMATION at DESTINATION

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

⑨ Name: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Organization: \_\_\_\_\_ Ph. \_\_\_\_\_ Fax. \_\_\_\_\_

RECORD of TRANSMITTALS (Shipment Approvals and identification/disposition) (Circumstances may influence distribution)

Shipment Approvals (Sent by ④ or ⑧) to (Show date sent)

OED CRCPD \_\_\_\_\_, ① \_\_\_\_\_, ② \_\_\_\_\_, ③ \_\_\_\_\_,

⑤ \_\_\_\_\_, ⑥ \_\_\_\_\_, ⑦ \_\_\_\_\_, OTHER \_\_\_\_\_

Record of Identification and Disposition (Sent by ⑦, ⑨, or other \_\_\_\_\_) to

OED CRCPD \_\_\_\_\_, ③ \_\_\_\_\_, ⑤ \_\_\_\_\_, ⑥ \_\_\_\_\_,

④ or ⑧ \_\_\_\_\_, OTHER \_\_\_\_\_

REMARKS, OTHER INFORMATION

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

In case of an emergency, notify the National Response Center ((800)424-8802) and the (⑧) authorizing official and give the Exemption No. E 11406 and Approval No.