U.S. Department of Transportation
Research and Special Programs Administration

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

MAR 23 1998

DOT-E 10594
(FOURTH REVISION)

EXPIRATION DATE: February 29, 2000

(FOR RENEWAL, SEE 49 CFR SECTION 107.109)

1. GRANTEE: The U.S. Department of Energy (DOE), Washington, DC, and certain DOE contractors involved with transportation of tailings and associated materials who have been granted party status ad identified in Appendix A.

   (See Appendix A to this document for a list of additional grantees)

2. PURPOSE AND LIMITATION: This exemption authorizes the transportation in commerce of certain uranium and thorium mill tailings and soils and other materials contaminated with radionuclides from uranium and thorium, in locations as noted in paragraph (A) of Annex 1 to this exemption. This exemption authorizes shipments of these low level radioactive materials in closed vehicles and bulk containers without detailed analysis of the contents in closed vehicles or bulk containers and with alternative requirements for hazard communication information and packaging. This exemption provides no relief from any regulation other than as specifically stated herein.

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

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR 171.15; 171.16; 172.202; 172.203 (c) (1) (I); 172.203(d); 172.302(a) and (b); 172.310; 172.331; 172.332; Part 172, Subparts E (labeling) and F (placarding); 173.22(a)(1); 173.403 (only as it relates to the definition of closed transport vehicle); except for requirements stated in this exemption, 173.427(a)(6); 173.443(a); 177.807; and 177.843(a).

5. BASIS: This exemption is based on the application of U.S. Department of Energy, Washington, DC, dated March 12, 1998, submitted in accordance with 49 CFR 107.109.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous materials description -- proper shipping name	Hazard Class/ Division	Identi- fication Number	Packing Group
Radioactive material, LSA, n.o.s.	Class 7	UN2912	N/A
Environmentally hazardous substance, solid, n.o.s.	Class 9	UN3077	III

7. PACKAGING AND SAFETY CONTROL MEASURES:

a. PACKAGING -

(I) Transport must be by closed transport vehicles or bulk containers. Loads shall be protected as much as practicable to prevent releases of radiologically significant amounts of materials during normal transport conditions.

(ii) Bulk containers with open tops may be considered closed transport vehicles (49 CFR 173.403) only if they are tightly covered with tarps, or if only loose material is properly sealed with a surfactant binding material prior to transport. Other features of these containers must be sufficiently tight to avoid release of contents during transport. The use of open-top containers without tarps are not authorized unless the application of the surfactant binding material and other preparations of the material prior to movement in transport are in full accordance with the procedures and performance demonstration tests approved and on file at DOE headquarters (EM-76). Even if the shipment is prepared in accordance with the approved procedures, there shall be no loose tailings or other contaminated materials on the surface of the binding material, at any time during transport under normal, non-accident conditions.

b. TESTING -

(I) Materials being transported do not need to be analyzed to allow classification and preparation of shipping documents that contain a proper shipping name, hazard class, and UN ID number, as required by 49 CFR 172.202. The Department of Energy (DOE) and

contractors operating under the control of the Department of Energy are authorized to offer and transport uranium and thorium mill tailings and soils and other materials contaminated with radionuclides from these tailings. Because of the very large volumes and relative uniformity of mill tailings, and contaminated soils and other materials, it is not necessary to determine the specific activity or the total activity of the radionuclides of the material in each closed transport vehicle or bulk container. A predetermination of the range of expected total and specific activity of conveyance contents may be made on a site by site basis for each of the locations or areas shown in paragraph (A) of Annex 1 to this exemption.

(ii) During transport, empty vehicles and bulk containers must be protected by tarps or other means to prevent release of residual materials from the inside or outside, but they do not need to be monitored each trip to prove compliance with 49 CFR 173.443(d) and 177.843(a). Before vehicles used under this exemption are released for transport of other commodities or uses, the dedicated use statement of 49 CFR 173.443(d) must be removed, and they must be thoroughly decontaminated to satisfy the requirements of 49 CFR 177.843(a), 173.443(a), and the applicable release standards of DOE.

c. OPERATIONAL CONTROLS -

(I) Normal operating procedures and emergency procedures shall be developed by DOE and/or DOE contractors. The emergency procedures shall be reviewed and approved by the Office of Environmental Management (EM-76) of DOE headquarters and shall be on file in that office and made available to the Department of Transportation (DOT) on request. The procedures shall be carried in the cab of each truck transporting materials under this exemption and shall include the type of information shown in paragraphs (B)(1) and (B)(2) of Annex 1.

(ii) DOE shall ensure that the operators of vehicles carrying materials under this exemption are provided with an adequate level of training as required by Subpart H of Part 172 which will provide an understanding of the radiation hazards of mill-tailings and in the emergency procedures for the shipments. Evidence of the training activities (names, dates, and locations) or basis for adequate understanding must be on file in the offices of the contractors and the DOE area offices responsible for the UMTRA program, and must be ma available to DOT upon request.

8. SPECIAL PROVISIONS:

a. The exemption holder shall meet the requirements prescribed in Annex 1 which is incorporated as part of this exemption.

b. The documentation accompanying the shipment does not require the detailed descriptive information specified in 49 CFR 172.202 and 172.203(c)(1)(I) and (d). However, the descriptive information about the shipments described in paragraph (B)(3) of Annex 1 to this exemption shall include a certification statement in accordance with 49 CFR 172.204(a) with the addition of the words "according to DOT-E-10594". This statement shall be signed by the DOE operating contractor.

(I) Container and vehicle marking requirements of 49 CFR 172.302(a) and (b), 172.310, 172.331, 172.332, and 173.427(a)(6)(vi) are waived, but the vehicles or bulk containers transporting the materials must bear the marking "For Radioactive Material Use Only" as prescribed in 49 CFR 173.443(d)(2). Except as otherwise specifically required in this exemption, operators are excepted from the requirements for LSA materials as specified in 49 CFR 173.427(a)(6).

(ii) Vehicles and/or bulk containers transporting materials under the provisions of this exemption shall have information posted on opposite sides as described in paragraph (C) of Annex 1 to this exemption.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.

10. MODAL REQUIREMENTS:

a. A copy of this exemption must be carried in the cab of each truck transporting materials under this exemption.

b. Descriptive information about the shipments, as prescribed in paragraph (B)(3) of Annex 1 to this exemption, shall be carried in the cab of each truck transporting materials under this exemption. That information plus the information in paragraph (B)(2) of Annex 1 shall, as a minimum, satisfy the emergency response information requirements of 49 CFR 172.600-604.

c. Motor carriers transporting materials under the provisions of this exemption must have a "Satisfactory" or "Conditional" motor carrier safety rating as required by 49 CFR Part 385.

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. Section 5101 et seq:

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

- Registration required by 49 CFR 107.601 et seq., when applicable.

Each "hazmat employee", as defined in 49 CFR 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 49 CFR 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:

a. For reporting spills or releases of tailings or other materials covered by this exemption, carriers are exempt from the reporting requirements of 49 CFR 171.15, 171.16, and 177.807. Carriers shall report spills or releases of greater than 15 pounds of material to the appropriate DOE UMTRA field office as identified in paragraph (B)(2) of Annex 1 to this exemption. The Department of Energy shall report spills to the Department of Transportation as a requirement of 49 CFR 171.15 and 171.16 if the spills or releases exceed either 1,500 pounds of material or one tenth of an RQ of radionuclides (49 CFR 172.101, Appendix, Table 2) or any spills of material known to have a specific activity exceeding 0.002 uCi/g.

b. Releases of tailings required to be telephonically reported by DOE according to paragraph 12(a) of this exemption, or other major incidents under this exemption, shall be reported as soon as practicable to the Associate Administrator for Hazardous Materials Safety.

c. Any reports prepared under the authority of DOE related to monitoring and evaluation of consequences of materials spilled during transport under this exemption shall be provided to the Associate Administrator for Hazardous Materials Safety.

Issued at Washington, D.C.:

Ann Mazzullo

for Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

MAR 23 1998
(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.

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.

Dist:FHWA

ANNEX 1

A. DOE Mill-Tailings Shipments

Origin/Destination	Miles	Mode
Grand Junction, CO/ Mesa County, CO	8	Truck
Mesa County, CO/ Mesa County, CO	20	Truck
Rifle, CO/Garfield County, CO	17	Truck
Gunnison, CO/ Gunnison, CO	7	Truck
Slick Rock, CO/ San Miguel County, CO	6	Truck
Naturita, CO/ Montrose, CO	17	Truck
Moffat County, CO/ Moffat County, CO	5	Truck
Durango, CO/ La Plata County, CO	7.5	Truck
Lowman, ID/ Boise County, ID	141	Truck
Navajo Reservation, AZ & UT/ Navajo Reservation, UT	36	Truck
Karnes County, TX/ Karnes County, TX	10	Truck
McKinley County, NM/ McKinley County, NM	5	Truck
Belfield, ND/ Bowman County, ND	132	Truck
Bowman County, ND/ Bowman County, ND	5	Truck
Monticello, UT/Suan Juan County, UT	60	Truck
Montrose County, WY/Natrona County, WY	220	Truck

B. Documentation in cab of truck

1. **Procedures for normal operations**
   Documents prepared by contractor and approved by DOE

2. **Procedures for emergency activities and spills.**

   a. Unexpected non-radiological activities (not related to tailings) documents to be prepared by contractor.

   b. The emergency procedures to be followed by the operator in the event of an incident causing release of material between origin site and destination shall include as a minimum, the following:

      - Priority actions related to life saving, care of injured and threats of a non-radiological and radiological nature.

      - Actions by operators to limit the dispersal of spilled material.

- Names and phone numbers of personnel involved in cleanup.

- Identification and phone numbers (day and night) of State Radiation Authorities to be notified of radiologically significant spills between points of origin and destination.

- Identification and phone numbers of the appropriate DOE UMTRA field offices to be notified of abnormal occurrences, such as releases exceeding 15 pounds of material.

c. Instructions for emergency response personnel:

- Must be conspicuously separate from emergency response instructions for carrier personnel.

- Information must be of general content and format of Guide 162 of the 1996 DOT North American Emergency Response Guidebook and shall be prepared by, or approved by, EM-76 of DOE headquarters.

- These instructions plus the information sheet described below must satisfy the requirements of 49 CFR 172.600-604.

3. **Shipment description.**

a. This information document should be conspicuously separate from the documents related to emergency response.

b. The shipment information sheets will be prepared by the contractor and/or the Department of Energy, but format and content must be approved by EM 76 of DOE headquarters.

c. Information must include the following:

- A copy of DOT-E 10594.

- Origin site and destination of shipment.

- General description of materials in shipment.

- The materials description should indicate that the tailings and other materials contain radioactive material which in some cases could result in the shipment being designated as "Environmentally hazardous substance,

solid, n.o.s., UN3077" or "Radioactive material, LSA, n.o.s., UN2912"; however, under the exemption, DOT-E 10594, the radioactivity in each shipment does not need to be determined. All shipments are assumed to be hazardous substances containing a reportable quantity (RQ) of RADIONUCLIDES.

- The identity and location of the DOE office(s) that can provide quantitative information about the mill tailings and materials, and the risk analysis documents, such as environmental impact statements.

- The shipper's certification statement (49 CFR 172.204) as modified by paragraph 8(b)of this exemption and signed by the contractor.

C. Information posted on conveyance.

1. Information posted on the opposite sides of the conveyance, or large bulk container, must be legible and printed on a contrasting background weather resistant durable material, and must be at least 30 centimeters (12") x 45 cm (18").

2. The posted information must be as follows:

"Low-level radioactive material in mill tailings and other materials.

(RQ RADIONUCLIDES) shipment is regulated by Department of Energy and Department of Transportation.

DOT-E-10594

For emergencies call (xxx)xxx-xxxx or see documents in cab"

3. The emergency response phone number shall be printed on the poster by the contractor and shall be the local number prescribed by DOE.