

# MOU Between the NRC and DOT

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This document reflects the Memorandum of Understanding (MOU) between the NRC and the Department of Transportation (DOT) that was published in the *Federal Register* on July 2, 1979 and a copy of the working arrangements between the DOT and NRC with respect to inspection/enforcement and accident/incident investigation.

## MEMORANDA OF UNDERSTANDING

44 FR 38690  
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## DEPARTMENT OF TRANSPORTATION

Nuclear Regulatory Commission

Transportation of Radioactive Materials; Memorandum of Understanding

The roles of the Department of Transportation and the Nuclear Regulatory Commission in the regulation of the transportation of radioactive materials were described in a memorandum of understanding signed on June 8, 1979. The present memorandum supersedes a 1973 agreement between the Atomic Energy Commission and the Department of Transportation. A text of the memorandum is set forth below.

## Radioactive Materials

*Abstract.* This agreement delineates the respective responsibilities of the Department of Transportation (DOT) and the Nuclear Regulatory Commission (NRC) for the regulation of safety in transportation of radioactive materials. It supersedes the existing agreement executed on March 22, 1973, between the DOT and the Atomic Energy Commission. Generally, the DOT is responsible for regulating safety in transportation of all hazardous materials, including radioactive materials, and the NRC is responsible for regulating safety in receipt, possession, use, and transfer of byproducts, source, and special nuclear materials. The NRC reviews and approves or denies approval of package designs for fissile materials and for other radioactive materials (other than low specific activity materials) in quantities exceeding Type A limits, as defined in 10 CFR Part 71.

*Agreement between the DOT and the NRC.* The Department of Transportation (DOT), under the Transportation of Explosives Act (18 U.S.C. 831-835), the Dangerous Cargo Act (R.S. 4472, as amended, 46 U.S.C. 170), Title VI and 902(h) of the Federal Aviation Act of 1958 (49 U.S.C. 1421-1430 and 1472(h)), the Department of Transportation Act (49 U.S.C. 1655), and the Hazardous Materials Transportation Act (49 U.S.C. 1801-1812), is required to regulate safety in the transportation of hazardous materials, including radioactive materials.

The Nuclear Regulatory Commission (NRC), under the Atomic Energy Act of 1954, as amended (42 U.S.C. Chapter 23), and Section 201 of the Energy Reorganization Act of 1974, as amended (42 U.S.C. 5841), is authorized to license and regulate the receipt, possession, use, and transfer of "byproduct material," "source material," and "special nuclear material" (as defined in 42

U.S.C. 2014). The NRC authority to license air shipment of plutonium is further governed by Pub. L.94-79.

For the purpose of developing, establishing, and implementing consistent and comprehensive regulations and requirements for the safe transportation of radioactive materials, and avoiding duplication of effort, the DOT and the NRC agree, subject to their respective statutory authorities, as follows. Terms used in this agreement are defined in 49 CFR Parts 100-199 and 10 CFR Part 71.

### *I. Development of Safety Standards*

A. The DOT (in consultation with the NRC) will develop safety standards for the classification of radioactive materials, for the design specifications and performance requirements of packages for quantities of radioactive materials (other than fissile materials) not exceeding Type A limits and for low specific activity (LSA) radioactive materials; for the external radiation fields, labeling, and marking of all radioactive materials packages and vehicles; for the mechanical conditions, construction requirements, and tie-down requirements of carrier equipment; for the qualifications of carrier personnel; for the procedures for loading, unloading, handling, and storage in transit; for any special transport controls (excluding safeguards) necessary for radiation safety during carriage; and for all other safety requirements except those specified in the next paragraph.

B. The NRC (in consultation with the DOT) will develop safety standards for design and performance of packages for fissile materials and for quantities of other radioactive materials (other than LSA materials) exceeding Type A limits in the following areas:

1. Structural materials of fabrication;
2. Closure devices;
3. Structural integrity;
4. Criticality control;
5. Containment of radioactive material;
6. Shielding;
7. Generation of internal pressure;
8. Internal contamination of packages;
9. Protection against internal overheating; and
10. Quality assurance of packaging design, fabrication, testing, maintenance, and use.

### *II. Adoption of Safety Standards and Regulations*

A. The DOT will adopt regulations imposing on shippers and carriers subject to its jurisdiction those standards developed by the DOT and the NRC pursuant to Section I of this Memorandum of Understanding and any additional requirements necessary to protect the public health and safety. The DOT will require NRC approval of designs of packages for shipment of fissile materials and other radioactive materials in quantities exceeding Type A limits (except LSA materials) by all persons subject to the jurisdiction of the DOT. The DOT will issue complete and comprehensive Federal regulations for the packaging and transportation of all radioactive materials as a part of its overall body of Federal regulations (49 CFR Parts 100-199) for the packaging and transportation of all hazardous materials.

B. The NRC will adopt packaging standards for fissile materials and for quantities of

other radioactive materials (other than LSA materials) exceeding Type A limits and will adopt regulations imposing on its licensees administrative, procedural, and technical requirements necessary to protect the public health and safety and to assure the common defense and security.

C. The NRC will adopt procedures, standards, and criteria for approval of package designs and for approval of special transport controls proposed by the applicant for a given package design. The NRC will require its licensees to comply with the DOT regulations when those persons are not otherwise subject to the DOT regulations.

### *III. Package Review*

A. The DOT will submit to the NRC for review the following package designs:

1. Specification containers. Approval by the NRC of package designs for fissile materials and for radioactive materials (other than LSA materials) in quantities exceeding Type A limits will be obtained before publication of such designs in the DOT regulations.

2. Packages with foreign certification. Approval by the NRC will be obtained before revalidation of the foreign certificates required in the DOT regulations for packages shipped between origins and destinations within the United States, except for import and export shipments. Approval by the NRC is not required if a package is used solely for export or import or if a package is authorized by the DOT regulations solely for transportation through or over the United States between origins and destinations outside the United States, the DOT has the responsibility for exercising discretion as to whether it requests NRC review of such packages.

3. Any package for which NRC evaluation is warranted in DOT opinion.

B. The NRC will evaluate package designs for fissile materials and for other radioactive materials (other than LSA materials) in quantities exceeding Type A limits and will, if satisfactory, issue approvals therefore (viz., a license, Certificate of Compliance, or other package approval) directly to the person requesting the approval.

### *IV. Inspection and Enforcement*

A. Each agency will conduct an inspection and enforcement program within its jurisdiction to assure compliance with its requirements. The NRC will assist the DOT, as appropriate, in inspecting shippers of fissile materials and of other radioactive materials in quantities exceeding Type A limits.

B. The DOT and the NRC will consult each other on the results of their respective inspections in the areas where the results are related to the other agency's requirements, and each will take enforcement action as it deems appropriate within the limits of its authority.

### *V. Accidents and Incidents*

A. The DOT will require of all carriers subject to its jurisdiction the notification and reporting to the DOT of accidents, incidents, and instances of actual or suspected leakage involving radioactive material packages if such an event occurs in transit and the DOT will promptly notify the NRC of such events.

B. The NRC will require of its licensees the notification and reporting to the NRC of accidents, incidents, and instances of actual or suspected leakage involving radioactive material packages if such an event occurs prior to delivery to a carrier for transport or after delivery to a receiver. The NRC will encourage the Agreement States<sup>1</sup> and the DOT will encourage the non-Agreement States to impose incident reporting requirements on shippers and receivers subject to the States' jurisdiction.

C. In all accidents, incidents, and instances of actual or suspected leakage involving packages of radioactive material regulated by the NRC, the NRC will normally be the lead agency for investigating the occurrence and preparing the report of the investigation. The DOT may either participate, as appropriate, in the investigation with the NRC as the lead agency or conduct a separate investigation. Subsequent to each investigation involving radioactive material regulated by the NRC, the NRC and the DOT will jointly define the scope of the enforcement actions to be taken by each agency to assure that shippers and carriers are subject to concurrent and equivalent enforcement actions but not unduly subject to duplicate enforcement actions.

D. This section V does not affect the authority of the National Transportation Safety Board, which is independent of the DOT and the NRC, to receive accident reports and to investigate transportation accidents.

#### *VI. National Competent Authority*

A. The DOT will be the national competent authority with respect to the administrative requirements set forth in the regulations for the Safe Transport of Radioactive Materials of the International Atomic Energy Agency (IAEA). In issuing certificates of competent authority for the United States under those regulations, the DOT will require for certain packages other than DOT specification containers an NRC approval in accordance with Section III.A of this Memorandum of Understanding. The NRC will provide to the national competent authority (DOT) technical support and advice pertaining to the transportation of radioactive materials.

B. The DOT will act as the representative of the United States to the IAEA and other international groups on matters pertaining to the administrative and safety regulatory aspects of transportation of radioactive materials. The NRC will provide technical support and advice to the DOT in this capacity.

#### *VII. Exchange of Information*

A. Prior to issuance of any regulation by either the DOT or the NRC involving transportation of radioactive material, each agency will advise and consult with the other to avoid possible conflict in regulations and to assure that : (1) the regulations will afford adequate protection of the health and safety of the public, (2) the effect of these regulations will not be inimical to the common defense and security of the United States; and (3) the regulations are in the public interest.

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<sup>1</sup> States which have entered into an Agreement with the Atomic Energy Commission or the NRC pursuant to Section 274 of the Atomic Energy Act of 1954, as amended, under which the NRC has relinquished to such States the majority of its regulatory authority over source, byproduct and special nuclear material in quantities not sufficient to form a critical mass.

B. The DOT and the NRC will exchange information, consult and assist each other within the areas of their special competence in the development and enforcement of regulations and procedures. Each agency will make available to the other subject to security requirements and statutory provisions affecting the release of information, summaries of inspection records, investigations of serious accidents, and other matters relating to safety in the transportation of radioactive materials.

#### *VIII. Working Arrangements*

The NRC and the DOT will designate appropriate staff representatives and will establish joint working arrangements from time to time for the purpose of administering this Memorandum of Understanding.

#### *IX. Effect*

A. Nothing herein is intended to affect the statutory exemption of shipments of radioactive materials made by or under the direction or supervision of the Department of Energy or the Department of Defense in accordance with the provisions of 18 U.S.C. 832(c).

B. This agreement shall take effect upon the signing by authorized representatives of the respective agencies, and shall supersede in its entirety the March 22, 1973. Memorandum of Understanding between the DOT and the Atomic Energy Commission.

C. Nothing in this Memorandum of Understanding is intended to restrict the statutory authority of either the DOT or the NRC.

Done at Washington, D.C. in triplicate, this 8th day of June 1979.

For the United States Department of Transportation

James D. Palmer, Administrator, Research and Special Programs Administration,  
Department of Transportation.

For the United States Nuclear Regulatory Commission

Joseph M. Hendrie, Chairman, Nuclear Regulatory Commission

# **WORKING ARRANGEMENTS BETWEEN THE DOT AND NRC WITH RESPECT TO INSPECTION/ENFORCEMENT AND ACCIDENT/INCIDENT INVESTIGATION**

## **I. BACKGROUND AND PURPOSE**

On June 8, 1979, the Secretary of the Department of Transportation (DOT) and the Chairman of the Nuclear Regulatory Commission (NRC) signed the "Memorandum of Understanding Between the United States Department of Transportation and the United States Nuclear Regulatory Commission for Regulation of Safety in Transportation of Radioactive Material." Sections IV and V of the Memorandum (Appendix A) set forth the responsibilities of each agency regarding inspection/enforcement and accident/incident reporting and investigation. Section VIII of the Memorandum provides that each agency "... will designate appropriate staff representatives and will establish joint working arrangements from time to time for the purpose of administering this Memorandum."

On December 3, 1979, the NRC amended its regulations in 10 CFR 71 to require that all shipments of radioactive material by NRC licensees be made in accordance with DOT requirements. The effect of this amendment was to allow the NRC to inspect and enforce all of the transportation activities of its licensees at the licensee's facilities.

The purpose of this document is to formalize working arrangements with respect to Sections IV, V, and VIII of the Memorandum of Understanding.

## **II. GENERAL PRINCIPLES OF WORKING ARRANGEMENTS**

- A. Each agency shall strive to avoid duplication of inspection and enforcement action on shippers and carriers of radioactive materials.
- B. Each agency shall designate points of contact within its regional and headquarters offices for purposes of implementation of these working arrangements. Matters affecting program and policy issues shall be handled by the headquarters elements of the agencies. Enforcement and other matters related to specific cases shall be handled, whenever possible, by the regional offices of the agencies. NRC and DOT points of contact are listed in Appendixes B through E.

## **III. INSPECTION ACTIVITIES**

- A. The NRC will be the lead agency to carry out inspection activities for its licensee-shippers and licensee-shipper-private carriers with respect to the requirements of 10 CFR 71 and 49 CFR. These inspections shall be carried out in conjunction with the integrated program of inspection and enforcement for NRC

licensees<sup>1</sup>, and principally will involve the shipper type requirements, including those in 49 CFR Parts 171 to 173, and 178 of DOT regulations.

- B. The DOT shall be the lead agency to carry out inspection activities on non-NRC licensee shippers (such as Agreement State<sup>2</sup> licensees, license-exempt DOE shippers, and shippers of naturally-occurring and accelerator-produced radioactive materials) with respect to 49 CFR Parts 170-173 and 178; and carriers with respect to 49 CFR Parts 174 through 177, and 390-397.
- C. In those cases where an NRC licensee-shipper-private carrier is involved (for example, a radiographer using his own vehicle, or a radioactive waste "broker" hauling waste in his own vehicle) the NRC may, in some cases, inspect such licensees against the carrier related requirements peculiar to radioactive materials (placarding, blocking and bracing, for example). NRC will in no case inspect against the motor carrier type requirements of 49 CFR Parts 390-397, which are solely the responsibility of the DOT.

#### **IV. ENFORCEMENT ACTIVITIES**

- A. The NRC will normally carry out enforcement actions for violations of the requirements of 10 CFR 71 and 49 CFR (except 49 CFR 390-397) by NRC licensee-shippers and licensee-shipper-private carriers. Nothing herein shall preclude enforcement actions of 49 CFR by DOT against NRC licensees. In the latter case, when DOT wishes to be involved on a specific case basis, the lead agency for the enforcement action shall be as mutually agreed upon by the agencies.
- B. The DOT will carry out enforcement actions for violations of 49 CFR (including Parts 390-397) by carriers of radioactive materials and shippers of radioactive materials from agreement states, or any other shippers otherwise not subject to NRC requirements (shippers of radium). Nothing herein shall preclude enforcement actions by state agencies against shippers subject to state requirements under any arrangements in effect between the DOT and a state licensing authority, or between the NRC and a state Licensing Authority.

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<sup>1</sup>"NRC licensee" means the holder of a license issued under the regulations in Parts 30 through 35, 40, 60, 61, 70 or 72 of Chapter I, Title 10 Codes of Federal Regulations.

<sup>2</sup>"Agreement State" means any state which has entered into an Agreement with the NRC pursuant to Section 274 of the Atomic Energy Act of 1954, as amended, under which the NRC has relinquished in such state the majority of its regulatory authority over source, byproduct, and special nuclear material in quantities not sufficient to form a critical mass.

- C. The lead agency on an enforcement action shall consult with the other agency on any case which involves:
1. An escalated enforcement action, e.g., such as a proposed civil penalty, by the NRC on an NRC licensee-shipper acting as a private carrier.
  2. A DOT enforcement action on any NRC licensee.

This coordination shall generally be initiated by a contact between the respective regional offices of each agency for the purpose of informing each other of the initiation of the action and to preclude duplicative action. Subsequently, a copy of the completed enforcement package will be transmitted by the regional office of either agency to the regional office of the other agency, as applicable in the specific case.

- D. In specific cases, where both agencies may be taking enforcement action, the NRC and DOT will jointly discuss the scope of the enforcement actions to be taken by each agency to assure that shippers and carriers are not subject to duplicate enforcement action for the same substantive violation.

## V. **ACCIDENT/INCIDENT REPORTING AND INVESTIGATION**

### A. **Reports**

1. The DOT shall promptly notify the NRC of the occurrence of accidents/incidents involving the transportation of radioactive materials as reported from any source, including reports by carrier pursuant to 49 CFR 171.15 and 171.16. Telephonic reports shall be directed to the NRC Operations Center 301/951-0550. A copy of the written report of the accident or incident subsequently received by the DOT pursuant to 49 CFR 171.16 shall also be mailed to NRC Headquarters, Office of Inspection and Enforcement, Safeguards and Materials Programs Branch, ATTN: Senior Health Physics (Transportation) M/S EWS 305A.
2. The NRC shall promptly notify the DOT of the occurrence and reporting by any source, including its licensees, of any incidents/accidents involving the transportation of radioactive materials. Such notification shall be made by telephone to the DOT/USCG National Response Center at 202-426-2675 or 800-424-8802. A copy of any "Preliminary Notification" (PN) issued by NRC shall also be sent to DOT, Headquarters, Office of Hazardous Materials Transportation, Enforcement Division, Radioactive Materials Enforcement Specialist, DHM-40.

B. Investigation

In all accidents, incidents, and instances of actual or suspected leakage involving packages of radioactive material offered for transport or transported by an NRC licensee, the NRC will normally be the lead agency for subsequently investigating the occurrence and preparing the report of the investigation. The DOT may either participate, as appropriate, in the investigation with the NRC as lead agency or conduct a separate investigation. Investigation activities shall normally be conducted at the regional level.

Subsequent to each investigation involving radioactive material regulated by the NRC, the NRC and the DOT will discuss the scope of the enforcement actions to be taken by each agency.

This document shall be reviewed and updated periodically.

Approved:

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James M. Taylor, Director, Date  
Office of Inspection and Enforcement  
Nuclear Regulatory Commission

Approved:

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Alan I. Roberts, Director Date  
Office of Hazardous Materials  
Transportation  
U.S. Department of Transportation