

**Memorandum of Understanding  
Between  
The U.S. Nuclear Regulatory Commission  
And  
The U.S. Department of Energy  
Concerning Coordination Relating to Radioactive Sealed Source Recovery**

*I. Introduction*

This Memorandum of Understanding (MOU), between the U.S. Nuclear Regulatory Commission (NRC) and the U.S. Department of Energy (DOE), is a modification and update of the "Memorandum of Understanding Between the U.S. Nuclear Regulatory Commission, Office of Nuclear Material Safety and Safeguards and the U.S. Department of Energy, Office of Waste Management, Concerning Management of Sealed Sources," dated June 18, 1999 (1999 MOU).

The National Nuclear Security Administration (NNSA), a semi-autonomous agency within the DOE, operates the Off-Site Source Recovery Project (OSRP) as part of the U.S. Global Threat Reduction Initiative (GTRI) program. This MOU provides for continued information exchanges, coordination, cooperation, and assistance between the DOE and the NRC related to GTRI/OSRP's mission of prioritizing, recovering, and storing certain unwanted, excess or uncontrolled radioactive sources, primarily in the form of sealed sources that represent an actual or potential threat to the common defense and national security or public health and safety with particular focus on such sources that could potentially be used in a radiological dispersal device (RDD) or for other malicious purposes. This MOU also addresses the processes by which the NRC requests the DOE recover radioactive sources outside normal GTRI/OSRP program operations, and by which the DOE responds to such requests.

This MOU also updates the Coordination Officers and meeting schedule, and revises the MOU to provide for termination only if requested by one of the parties.

*II. Background*

The 1999 MOU outlined the procedures by which the NRC requested that the DOE Office of Environmental Management's Off-site Source Recovery Project (OSRP) recover certain radioactive material licensed by the NRC, primarily in the form of sealed sources, as necessary to protect the public health and safety or the environment. Subsequent to the 1999 MOU, and after the events of September 11, 2001, the DOE and the NRC reevaluated how, and under what circumstances, sealed radioactive sources would be recovered by the DOE. As a result of this reevaluation, the DOE, in consultation with the NRC, prioritized radioactive source recovery activities based on the potential for use of the radioactive material in a RDD or for other malicious purposes. Since 1999, the DOE has expanded its sealed radioactive source recovery program to focus not only on sources that pose threats to public health and safety, but also to focus on those that pose threats to national security. The program was transferred from the DOE Office of Environmental Management to the NNSA and is now part of NNSA's GTRI program. The GTRI program has a broader scope than the original DOE source recovery program and focuses its source acceptance and management efforts on sealed radioactive sources that pose a threat for malicious use.

### *III. Purpose*

This MOU provides for the continuation of information exchanges and related actions that assist DOE/NNSA in prioritizing, recovering, and storing radioactive sealed sources as part of ongoing GTRI/OSRP source recovery efforts.

This MOU also describes the processes by which the NRC and the DOE interact in situations that are outside the normal operations of the GTRI/OSRP source recovery program, when the NRC requests that the DOE take certain sources to mitigate or eliminate an actual or potential threat to national security or public health and safety, after other reasonable alternatives have been explored.

Finally, this MOU updates the Coordination Officers meeting schedule and termination clause contained in the 1999 MOU.

### *IV. Scope*

This MOU applies only to unwanted, excess, or uncontrolled radioactive material, primarily in the form of sealed sources and devices that are licensed by the NRC or an Agreement State, that represent an actual or potential threat to national security or public health and safety.

No activities contained in this MOU are intended to undermine the authorities or responsibilities of the States as defined in the Low-Level Radioactive Waste Policy Amendments Act, 1985 (Pub. L. 99-240), as amended. Further, situations that would be considered an emergency solely due to the lack of access to a compact or regional disposal site are outside the scope of this MOU. These situations are covered in the emergency access provisions of Pub. L. 99-240 and must be addressed in accordance with 10 CFR Part 62.

The NRC may request assistance by the DOE to recover radioactive material under this MOU in situations that are outside the normal operations of the GTRI/OSRP source recovery program, and, as part of its request, the NRC will identify the response requested of the DOE. The level of response in such situations will be based on an assessment of the potential national security, health or safety consequences of the situation (e.g., amount of material involved, potential for radiation exposure or releases of radioactive material, and national security risks). The DOE will provide assistance only after appropriate actions have been taken by the involved parties to mitigate the immediate national security or public health and safety concerns and only after reasonable alternatives to address the threat have been explored by the involved parties (see Section VI.C.1.b(1)). The involved parties can be various depending on the particulars of the situation; for example, often times it is a regulatory agency or local law enforcement, with the assistance of the entity who found the material or the licensed user of the material.

The DOE will determine the appropriate response to the NRC's request for assistance to ensure the present or potential threat is mitigated or eliminated in such situations where existing controls may not be adequate to ensure long-term assurance of national security or public health and safety.

In situations involving NRC requests for DOE assistance, the radioactive material must be in a form that is readily transportable, does not require significant special or unique handling equipment or capabilities, and is confined to a single location. Where the materials involved do not meet these conditions, but NRC determines that requesting DOE assistance is appropriate, the NRC will document the reason why a response under the terms of this MOU is appropriate and why DOE assistance is necessary for the particular situation. The NRC will provide this information to the DOE. The DOE will review this information and document the response it intends to take based upon the information provided, and provide this information to the NRC. So as to not delay a response to a request for assistance, this exchange of information may take place electronically.

The provisions of this MOU relating to the NRC's requests for DOE recovery of material that are outside the normal operations of the GTRI/OSRP source recovery program do not apply to emergency situations requiring an immediate response, to situations for which immediate national security or public health and safety concerns have not been mitigated, or to situations for which the NRC would not be designated as the coordinating agency for the federal response to a radiological incident.

The authorities and responsibilities of certain Federal agencies (including the NRC and the DOE) for responding to radiological emergencies are specified in the National Response Framework (NRF). The Nuclear/Radiological Incident Annex (NRIA) to the NRF describes the policies, situations, concepts of operations, and responsibilities of Federal departments and agencies governing the immediate response and short-term recovery activities for incidents involving release of radioactive materials to address the consequences of the event. Activities under this MOU must be consistent with the NRF and must not interfere with or take precedence over NRF activities. In addition, actions necessary to mitigate an emergency requiring an immediate response, or to mitigate an immediate national security or public health and safety threat (radiological or otherwise)—including temporary control over radioactive material—must be completed prior to any DOE recovery activities.

This MOU does not apply to requests for radiological assistance from DOE Radiological Assistance Program teams.

This MOU is generally limited to the recovery of radioactive sealed sources and those activities related to the recoveries (e.g., license amendments for involved parties, transportation cask approvals). This MOU is not intended to require or imply that the DOE will provide decontamination or clean-up activities, except as a direct result of a DOE recovery operation, nor will the DOE be expected to perform recovery actions for materials other than those specifically identified in this document.

This MOU does not apply to reactor incidents, or to spent nuclear fuel or high level radioactive waste, as defined by the Nuclear Waste Policy Act of 1982 (Pub. L. 97-425), as amended.

## *V. Authority*

### A. NRC

The NRC is responsible for licensing and regulating nuclear facilities and material and for conducting research in support of the licensing and regulatory process, as mandated by the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and other applicable statutes. The NRC responsibilities include ensuring adequate protection of public health and safety, promoting the common defense and security, and protecting the environment.

The NRC is charged with the responsibility of protecting the public health and safety through regulatory control of the safe use of byproduct, source, or special nuclear material, for medical, industrial, academic, and commercial uses. To accomplish this goal, the NRC uses licensing, inspection, enforcement, development and implementation of regulations, guidance and policy, safety reviews for products that use the material (including sealed sources and devices), and other means available according to Chapter 1 of Title 10 of the Code of Federal Regulations.

#### B. Agreement States

Section 274 of the Atomic Energy Act of 1954, as amended, provides the NRC the authority to discontinue its regulatory authority over certain radioactive materials (including sealed sources and devices) within a State that has agreed to establish and maintain a regulatory program for the materials that is adequate to protect the public health and safety, and is compatible with the NRC's program. States that have been found to meet these criteria and have entered into such agreements with the NRC are called Agreement States. These Agreement States have independent authority to regulate the radioactive materials specified in the agreement within their boundaries, and are charged with protecting the public health and safety through the licensing, regulation, and enforcement of activities associated with the materials. Under Pub. L. 99-240, each State is responsible for providing for the disposal of class A, B or C low-level radioactive waste generated within the State by (a) non-Federal entities, and (b) the Federal Government, except waste owned or generated by the DOE, certain Department of Navy owned or generated waste and waste owned or generated as a result of certain atomic weapons activities. In addition, State and local governments have primary responsibility for determining and implementing appropriate measures to protect life, property, and the environment from radiological and other hazards.

#### C. DOE/NNSA

The DOE is responsible for contributing to the common defense and security, conducting research and development, and other activities, to support the use of byproduct, source, and special nuclear materials for medical, biological, health, and other uses as mandated by the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; the Department of Energy Organization Act, as amended; and other applicable statutes.

The DOE is required to assure the public health and safety as mandated by Section 102(13) of the Department of Energy Organization Act, as amended, and is responsible for consultation and coordination with the NRC in the development of contingency plans for dealing with threats, thefts, and sabotage from all licensed activities under Section 204(b)(2)(B) of the Energy Reorganization Act of 1974, as amended. In addition, the DOE has the authority to acquire and to provide for the disposition of any special

nuclear, source, or byproduct material as authorized by Sections 55, 66, 81, and 161 of the Atomic Energy Act of 1954, as amended.

## *VI. Agency Responsibilities and Agreements*

### **A. In General**

The NRC and the DOE staffs will closely coordinate actions in both the planning and execution phases to: (1) ensure a timely response where DOE assistance is appropriate; (2) provide adequate security of the material as well as protection of the health and safety of the public and occupational workers involved in responding to requests for assistance; and (3) ensure cost effective operations. Each agency will develop, in consultation with the other, appropriate procedures as necessary to implement this MOU. Each agency will designate the organization and key personnel responsible for the day-to-day coordination and management of activities covered by this MOU.

### **B. Information Exchange**

Both agencies agree to exchange information with respect to relevant programs and lessons learned. The purpose of the exchanges is to provide expert technical assistance to both agencies and to assist either agency by reducing or eliminating duplication of effort. The sharing of information between the DOE and the NRC (and Agreement States, as appropriate) will be exercised to the extent authorized by law (i.e., NRC and DOE directives, statutes, regulations and executive orders), and will be consistent with each agency's missions.

Both agencies recognize the need to protect from public disclosure, data and information that are exchanged between them, which fall within the definition of trade secrets, confidential commercial or financial information, information protected from disclosure under the Atomic Energy Act of 1954, as amended, or other applicable statutes or executive orders, and information which is otherwise exempt from disclosure under the Freedom of Information Act, as amended. Both agencies agree to exchange such information in accordance with applicable directives, statutes, regulations, and executive orders. If one of the agencies receives a request, such as a Freedom of Information Act request or Congressional inquiry, or has regulatory or public information policies that call for a disclosure determination regarding information obtained from the other agency, the disclosing agency will promptly notify the other agency of the need for a disclosure determination. In the case of such requests, the agency that originated the information will render a disclosure determination and transmit the disclosure determination to the other agency.

Both agencies, in collaboration with other agencies, as appropriate, will exchange information and agree to, and establish, a methodology for prioritizing source recovery, including recovery under the GTRI program, taking into account the threat posed by the material, including health and safety considerations, security considerations, and other information, as appropriate, giving due consideration to changing priorities over time. In establishing the prioritization methodology, both agencies will consider the "Radiation Source Protection and Security Task Force Radiation Sources Subgroup Report Reevaluation of the List of Radioactive Sources that Warrant Enhanced Security and

Protection and Quantities of Radioactive Material Sufficient to Create a Significant Radiological Dispersal Device or Radiation Exposure Device," International Atomic Energy Agency (IAEA) "Code of Conduct on the Safety and Security of Radioactive Sources," GTRI's "Protection and Sustainability Criteria," and other documents, as appropriate.

The DOE and the NRC will notify each other when either agency becomes aware of information that would change the prioritization of any particular source or entity, or becomes aware of information that may require changes to the prioritization methodology.

The DOE will provide periodic updates to the NRC concerning the number and types of sources recovered.

The DOE and the NRC will also offer each other the opportunity to comment on regulations, regulatory guides, or other communications (including press releases and other public releases of information) that refer to activities, policies, or regulations of the other agency, that are relevant to this MOU. If practicable, the documents will be provided for comment prior to issuance. Either agency may request additional information, when such is deemed necessary to complete its mission.

#### C. NRC Requests for DOE Recovery of Radioactive Material Outside the Normal Operations of the GTRI/OSRP Program.

##### 1. NRC Responsibilities

a. Upon discovery of a potential radioactive material incident concerning NRC or Agreement State licensed material in an uncontrolled condition that does not require activation of the NRC Incident Response Plan, the NRC regional and headquarters offices will follow the procedures contained in NRC Manual Chapter (MC) 1301, "Response to Radioactive Material Incidents that do not Require Activation of the NRC Incident Response Plan," and NRC MC 1303, "Requesting Emergency Acceptance of Radioactive Material by the U.S. Department of Energy (DOE)," as applicable.

##### b. MC1301 and/or MC1303:

- (1) Specifies those requirements necessary to evaluate whether a request for DOE recovery assistance is appropriate and in accordance with this MOU, including whether:
  - a. the material is an actual or potential threat to national security and/or public health and safety, taking into account the following considerations:
    - i. whether the licensee or possessor is able to adequately maintain control over the material and available options for achieving this; and
    - ii. whether the material is causing, or has a high potential to cause, a significant risk to national security or public health and safety.
  - b. all reasonable and appropriate available options for disposition of the material have been adequately addressed, including whether other viable options are available for recovery and management of the radioactive material, or are available to assist in the recovery of the material to minimize the cost to the government (e.g., other entities providing for the packaging and/or transport of the material).

- (2) Specifies the procedures for making an official request for DOE assistance, including:
  - a. the information that is to be provided to the DOE (e.g., sealed source identification and condition information, licensee name, point of contact, applicable historical information, etc.); NRC addressee for the request; and follow-up actions after the request is made; and
  - b. that the NRC will: (1) provide appropriate information available on the incident; (2) determine if any additional information is needed; and (3) identify any special conditions or requirements concerning the incident.
  
- (3) To the maximum extent possible, the NRC will:
  - a. provide the DOE with the opportunity to review and comment on draft versions of revisions to these procedures; and
  - b. consider comments provided by the DOE for possible incorporation into revised procedures

c. Upon determining that DOE assistance is appropriate, the NRC will coordinate initially (via telephone or electronic media) with the DOE Coordination Officer. If a formal request is necessary, NRC staff will formally request DOE assistance in accordance with MC1303.

d. In situations involving NRC requests for DOE assistance, the NRC will assist the DOE in coordinating assistance and cooperation of other parties involved (e.g., Agreement States, NRC licensees, etc.).

e. The NRC will direct Agreement States seeking DOE assistance under this MOU to make all requests through the NRC, following the guidance in MC 1303. The NRC staff will evaluate the Agreement State's request and determine if all applicable information has been provided and if requesting DOE assistance is appropriate. The NRC will not forward the request to the DOE until the request contains complete information and provides sufficient justification for requesting DOE assistance, and will work with the Agreement State to obtain this information. The NRC will make all requests for DOE assistance under this MOU on behalf of the Agreement States and will serve as the single point-of-contact for evaluating the requests in accordance with this MOU.

f. In situations involving NRC requests for DOE assistance, the NRC will coordinate transfer of title of the recovered materials to the DOE or to other parties who are authorized to take possession of the material, as designated by the DOE.

g. Subject to its authority, the NRC will ensure, and expedite where appropriate, such action as necessary to support safe and timely recovery of the materials and to minimize costs to the government incurred in recovery, transportation, and management operations. If NRC action is taken, the NRC will provide the DOE Coordination Officer for this MOU the opportunity to review drafts and provide comments to the maximum extent practical.

h. The NRC will assist in coordinating the efforts of non-DOE involved parties, including Agreement States and licensees, in recovery operations, and participate, as appropriate, to ensure adequate security of the radioactive material, protection of public/worker health and safety, and regulatory compliance, as applicable.

## 2. DOE Responsibilities

- a. The DOE will participate and consult with the NRC in the determination process for requesting DOE assistance.
- b. Upon receipt of a formal request for assistance, the DOE will review the request against this MOU, Departmental policies in effect at the time of the request, changes in legislative authority which may affect actions requested, and expected cost versus available funds to carry out the requested action. The DOE will review each request to ensure all reasonable and appropriate available options for disposition have been exhausted prior to providing assistance. Upon completion of this review, the DOE will notify the NRC if it will take action and, if so, what action it will take.
- c. Upon acceptance of a request for assistance, the DOE will receive and may store the radioactive material at a DOE or other appropriate facility. If identification, packaging, transport, and related services are not provided by the licensee or by other involved parties, the DOE will provide such services or contract with appropriately licensed firms for these services.
- d. The DOE will coordinate, through the NRC, with the licensee and/or local authorities and other agencies, as appropriate, regarding the details of the recovery operations and provide information on progress and status.
- e. The DOE will take title of the radioactive material either at the material pickup location or at the designated receiving site, as determined by the DOE on a case-by-case basis, or ensure title is transferred to appropriate parties contracted for services.
- f. The DOE will plan and budget, as appropriate, for its costs to provide for reasonably expected requests under this agreement.
- g. The DOE will utilize its field elements, contractors, laboratories, and facilities, and private industry, as appropriate, in recovery operations for the safe, timely, and efficient conduct of these operations. The use of these facilities is limited to those sites with appropriate capabilities and compliance with applicable regulations and laws, as well as necessary funding. If such a site or necessary funds are not available, the DOE will consult with the NRC and other Federal and State agencies, as appropriate, to determine if managing the material may be accomplished by other means.
- h. If the DOE identifies a situation where the DOE believes the NRC action is necessary in order to accomplish a recovery, the DOE will inform the NRC as early as practicable. The DOE will coordinate initially (via telephone or electronic media) with the NRC Coordination Officer. If a formal request is necessary, the DOE will provide written formal notification to the NRC Responsible Office.

### *VII. Responsible Offices and Coordination Officers*

The following are the offices responsible for this agreement

A. For the NRC: Director, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Mail Stop T8-A23, Washington, D.C. 20555. Telephone: (301) 415-7000.

B. For the DOE: Assistant Deputy Administrator for Global Threat Reduction, National Nuclear Security Administration, 1000 Independence Avenue SW, Washington, D.C. 20585. Telephone: (202) 586-9215.

Each agency will also designate a Coordination Officer for the MOU to serve as a point of contact to facilitate routine contact between the agencies on matters related to the MOU.

#### *VIII. Meetings*

The DOE and NRC Coordination Officers, or their designated representatives, will meet at least annually to evaluate the activities related to this MOU and to determine the need for any recommendations to agency heads on its effectiveness. The DOE and the NRC will host the meeting on alternating years.

#### *IX. Other Laws and Matters*

This MOU is neither a fiscal nor a funds obligation document. Nothing in this MOU authorizes, nor is intended to obligate either party to expend, exchange, or reimburse funds, services, or supplies, or transfer or receive anything of value, or enter into any contract, assistance agreement, interagency agreement, or other financial obligation.

All activities pursuant to this MOU are subject to the availability of appropriated funds and each agency's budget priorities.

This MOU is strictly for NRC and DOE internal management purposes. This MOU is not legally enforceable and shall not be construed to create any legal obligation on the part of either party. This MOU shall not be construed to provide a private right of action for or by any person or entity.

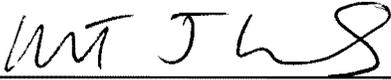
All understandings herein are subject to, and will be carried out in compliance with, all applicable laws, regulations and other legal requirements.

#### *X. Effective Date, Modification, and Termination of MOU*

This MOU may be further implemented by supplementary agreements in which authorized representatives of the DOE and the NRC may further amplify or otherwise modify the policy or provisions in the MOU or any of its supplements, provided that any material modifications of the provisions or any of its supplements shall be subject to the approval of the authorized signatories of this MOU or their designated representatives.

This MOU will take effect when it has been signed and dated by the authorized representatives of the DOE and the NRC. It may be modified by mutual written consent, or terminated by either agency upon 60 days advance written notice.

Approved and accepted for the  
U.S. Nuclear Regulatory Commission

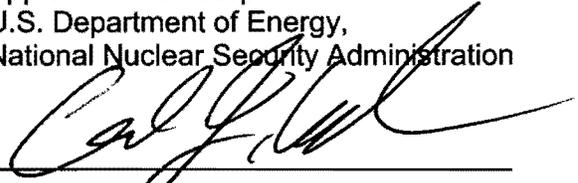


Robert Lewis  
Director,  
Division of Materials Safety and  
State Agreements  
Office of Federal and State Materials and  
Environmental Management Programs

1/3/2011

Date

Approved and accepted for the  
U.S. Department of Energy,  
National Nuclear Security Administration



Andrew Bieniawski  
Assistant Deputy Administrator  
for Global Threat Reduction

12/29/10

Date