

**U.S. Nuclear Regulatory Commission Staff Views on Resolution of Major U.S.  
Department of Defense Comment Areas and New Concerns Raised in Discussions  
with U.S. Department of Defense**

The following U.S. Department of Defense (DoD) comment areas, new concerns, and resolution approaches were discussed within the U.S. Nuclear Regulatory Commission (NRC)-DoD working group. The NRC staff believes that the approaches developed to resolve these comments have substantially reduced unnecessary dual regulation and the potential for cost and schedule impacts raised by DoD in its comments on the draft Regulatory Issue Summary (RIS). The DoD's August 1, 2013, letter (Enclosure 1) also states that the Memorandum of Understanding (MOU) option would address its concerns regarding the draft RIS.

**Major DoD Comment Areas**

**1. Remediation of radium contamination**

The DoD commented that it was statutorily required by the Defense Environmental Restoration Program (DERP) to remediate using the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process. Discussions of this topic established a mutual recognition of the overlap of jurisdiction for both the radioactive materials and the NRC decommissioning process under the Atomic Energy Act of 1954, as amended (AEA) and the remediation process under CERCLA. The NRC understands that DoD is statutorily required under DERP to remediate its properties using the CERCLA process and that radioactive materials are defined as hazardous substances under CERCLA. The DoD acknowledged that under the AEA, the NRC has regulatory authority over certain radioactive material. Therefore, the need for developing a process to manage this "overlap" in jurisdiction was also discussed. The NRC noted that it has encountered this "overlap" before and has often established MOUs to define a process to coordinate and cooperate.

The NRC's draft RIS proposed the NRC involvement with DoD remediation under the CERCLA process would be implemented in a way that would reduce unnecessary dual regulation. As a result, one of the principal regulatory approaches in the draft RIS for remediation of sites on the National Priorities List (NPL) that are regulated by the Environmental Protection Agency (EPA) was to rely on the CERCLA process and the regulatory oversight, but stay informed. This approach was previously approved by the Commission and the staff and DoD have successfully implemented this approach for the past 5 years at the Navy's Hunters Point and Alameda sites and the Air Force's McClellan site. The DoD did not comment on this approach proposed in the draft RIS.

For DoD remediation of sites without the EPA regulatory oversight (e.g., sites not listed on the NPL; i.e., non-NPL sites) the staff identified in the draft RIS that the NRC should have an oversight role. The staff had proposed in the draft RIS a licensing approach that would be coordinated with the CERCLA process. These sites have some degree of state oversight. The staff did not propose relying on state oversight as a general policy in the draft RIS because the Agreement States cannot regulate federal entities. Also, other state agencies involved with the CERCLA process may not have radiological expertise or experience in decommissioning complex sites contaminated with radioactive

material and would need to arrange for assistance. For these types of sites, the staff proposed that it could rely on the CERCLA process and documents instead of requiring the NRC decommissioning process and documents, but it would need to provide independent oversight.

To achieve this oversight, the staff initially proposed a possession only license (POL) for just the AEA material subject to the NRC's jurisdiction, thereby avoiding dual regulation of the ongoing DoD remediation that is taking place under CERCLA. Although the NRC continues to believe this approach would eliminate the unnecessary administrative costs associated with licensing, the DoD continued to object to the NRC's proposed POL, primarily due to the permit exclusion under § 121(e)(1) of CERCLA and because of its concern about the potential for impacts on the cost and schedule of the DoD's remediation and agreements for the transfer of property under the Base Realignment and Closure process.

Instead of the POL approach, the DoD proposed that the NRC's involvement should be under an MOU instead of licensing. The working group prepared and discussed a draft of the MOU. The staff prepared and provided the DoD with the key provisions of the draft MOU given in Enclosure 4 as a proposed revised structure for the MOU. The key provisions also summarize the current scope and approach. The MOU would include existing NRC activities at Navy's Hunters Point and Alameda sites and the Air Force's McClellan site.

## 2. Radium on firing ranges

The NRC's draft RIS had included examples of radium contamination that would be subject to the NRC regulation under the Naturally Occurring and Accelerator Produced Radioactive Material (NARM) Rule. One of the examples given in the Statement of Considerations (SOC) for the NARM Rule was for "targets and associated contamination on firing ranges..." DoD comments on the draft RIS stated that training and testing on **operational** military ranges are "military operations" and should continue to be clearly excluded from the scope of the NRC jurisdiction over radium. The DoD also commented that the NRC involvement on operational ranges could conflict with the DoD's training mission. The NRC clarified that that radium contamination on **operational** firing ranges would not be subject to the NRC regulation because of the military operational exclusion in the NARM Rule SOC and because the risk of exposure is low. The NRC recognizes that the DoD's controls of operational ranges for unexploded ordnance would limit the likelihood of an exposure to radium. Furthermore, the NRC's independent dose estimates (in the range of 0.7 to 7 mrem/yr) agree with the DoD's comment that the dose consequence is low if there were an exposure. For **closed** firing ranges, the DoD noted that the CERCLA process would be used for remediation. As a result, the NRC would be involved with the DoD's remediation of closed firing ranges under the MOU.

### 3. Radium items and equipment with no future military operational use

In its comments on the draft RIS, DoD stated that the procedural costs of the NRC licensing could be over \$20 million because without an Army Master Materials License (MML), the Army would need to obtain nearly 100 different licenses for radium. In discussions with the NRC staff on this comment area, the Army explained that after further assessment of the inventory, it had found that most of its items were already disposed of and those remaining are scheduled for disposal. Other radium items and equipment have been added to Army museum licenses. The Army controls the number of museum items to remain below the 100 items limit allowed under the NRC general license for museums. Therefore, DoD concluded that its comment on the draft RIS is no longer an issue. The NRC also confirmed that the Air Force and Navy currently regulate radium items and equipment in storage or used for calibration or research and development under the Air Force and Navy MMLs.

### 4. Clarification of NRC's jurisdiction for military radium

The DoD commented that the draft RIS is not consistent with the Energy Policy Act of 2005 (EPAAct) statutory requirement and is a significant change to the NRC's interpretation in the SOC for the 2007 NARM Rule for regulatory authority over military operational radium. Contrary to DoD's assertions, the staff considers that the draft RIS is entirely consistent with the regulatory framework established by the NRC in the NARM Rule. The SOC carefully detailed the authorization contained in 651(e) of the EPAAct that gave the NRC regulatory jurisdiction over radium. The NRC very specifically discussed the scope of this expanded jurisdiction paying close attention to its effect on the military services. The NRC acknowledged that the expanded authority did not pertain to certain military radium, but also recognized that some radium used by the military was subject to the NRC jurisdiction. The NRC stated the "exclusion from the coverage of the EPAAct only applies to a certain type of military use, i.e., NARM used for 'military operation'" (72 FR at 55867, October 1, 2001). Far from amending the scope of the NRC's jurisdiction over military radium, the draft RIS preserves the distinction by clarifying the exceptions alluded to in the NARM Rule. Specifically, the NARM Rule affirmed that if "[radium-226] is **intended** for use in military operation, it is excluded from coverage of this rule..." The draft RIS merely clarifies the converse, which is if radium in the military's possession is **not** intended for use in or used in military operations then it is subject to the NRC regulations. The draft RIS also clarifies what is meant by material in storage or that may be subject to decontamination and disposal. In order to be excluded from the NRC's regulatory authority, the radium in the military's control would have to be used, or intended for future use in military operations; and items and equipment in storage which are not being used and which are not intended for future use is subject to the NRC's regulations. The draft RIS does not change the NRC's previously adopted regulatory framework.

### New concerns identified during NRC discussions with DoD

#### 5. Remediation of unlicensed AEA contamination

In addition to discussing DoD's remediation comments on the military radium draft RIS, the staff raised the concern that DoD is in possession of and remediating unlicensed AEA material subject to the NRC's jurisdiction without NRC involvement in the process. For example, some military sites currently being remediated contain licensable strontium-90 commingled with radium. Site lists provided to the NRC by DoD identify the sites where unlicensed AEA material has been confirmed. The DoD and the staff agreed that a comprehensive MOU should be developed that would provide a single, consistent approach for all AEA licensable material.

#### 6. Remediation of contamination in building interiors

Staff discussions with DoD and EPA Region 9 clarified that the remediation of building interiors where there is no release or threat of release to the environment is not conducted under the formal CERCLA process. This position is consistent with EPA's Office of Solid Waste and Emergency Response Directive 9360.3-12. As a result, DoD explained that it uses a CERCLA-like process instead. The staff understands from EPA Region 9 that its reviews of building interiors is limited to final status survey reports of the buildings as part of a larger parcel of land and that EPA Region 9 relies on state reviews. While EPA Region 9 is aware of the work in buildings, it does not provide comments to DoD. The staff also understands from discussions with the state that while the state does not have formal regulatory authority for DoD's remediation of buildings, it conducts reviews and provides a release so that the property can be transferred to a non-federal owner without the potential for state licensing after transfer. Generally for these cases, the staff considers that the NRC should conduct monitoring under the MOU unless for specific buildings the remediation is clearly being conducted under the CERCLA process with EPA regulatory oversight.

#### 7. NRC fees for implementing the MOU at specific sites

A significant new concern identified during the discussions with DoD pertains to the NRC fees for its activities under a license or the MOU. Under Section 161w of the AEA and the Omnibus Budget Reconciliation Act of 1990 (42 U.S.C. 2214), the NRC lacks the statutory authority to charge DoD fees under either Part 170 (fees for services) or Part 171 (annual fees) because DoD is not a license applicant, licensee, or certificate holder. Yet the Omnibus Budget Reconciliation Act of 1990 requires the NRC to recover approximately 90 percent of its budget authority through fees. Accordingly, the regulatory costs associated with this MOU must be recovered through either annual fees to other licensees or included in the 10 percent of the NRC's budget that is off the fee base and recovered through Congressional appropriations. This latter approach would entail creating a new fee relief category for the regulatory activities under the MOU.

The fee relief option would not result in raising the fees of the NRC licensees because the NRC's activities under the MOU would be included in the 10 percent of the NRC's budget that is off the fee base. The fee relief option was established in 1995 (SRM-SECY-95-017) to address issues of fairness and concerns raised by licensees.

Existing licensees should not have to pay for the NRC activities with DoD remediation under an MOU because they do not directly receive benefits from these NRC activities. The Commission would need to approve establishment of a new fee relief category because the current categories do not reflect the NRC involvement with DoD remediation under an MOU. This option would pertain to the NRC involvement under the MOU at any of the DoD sites being remediated under the CERCLA process.

An alternative option would result in redistributing the cost of the NRC involvement under an MOU among existing NRC licensees. This would require the NRC to grant DoD a fee exemption. This would likely cause licensees to raise concerns about fairness and equity because the NRC activities do not directly benefit existing licensees. This process would require implementation via numerous letters from DoD requesting fee exemptions at specific sites due to the NRC's lack of statutory authority to assess DoD fees. This complicated implementation would result in additional effort by both DoD and NRC compared to the simpler fee relief process that would apply to all DoD sites being remediated under the CERCLA process.