

**Resolution of Issues Regarding the U.S. Nuclear Regulatory Commission's  
Involvement with the U.S. Department of Defense Remediation of Radium and  
other Atomic Energy Act Radioactive Material Subject to U.S. Nuclear Regulatory  
Commission Regulatory Authority**

In the U.S. Nuclear Regulatory Commission's (NRC) Naturally Occurring and Accelerator Produced Radioactive Material Rule Statement of Considerations (72 FR 55864; October 1, 2007), the Commission directed the staff to interact with the U.S. Department of Defense (DoD) and resolve issues related to military radium. As a result of the staff's annual site visits to Air Force and Navy sites since 2007, and the more recent meetings with DoD regarding the draft Regulatory Issue Summary (RIS), the following key issues would be resolved by completing the comprehensive remediation Memorandum of Understanding (MOU) and final RIS.

1. Confusion over what radium in military possession is subject to the NRC regulatory authority.

Questions that have been raised about the NRC's regulatory authority for military radium and approaches for implementation would be clarified by the RIS. Specifically, military radium excluded and not excluded from the NRC's regulatory authority would be clearly documented. The RIS and the comprehensive remediation MOU would describe the NRC's role in monitoring DoD's remediation of radium. Both the RIS and MOU establish one consistent process for the NRC's involvement with DoD's remediation of radioactive material across the range of sites under DoD's Defense Environmental Restoration Program.

2. Potential dual regulation from the overlap of the Atomic Energy Act of 1954, as amended (AEA), and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) for DoD remediation of AEA radioactive material subject to the NRC's regulatory authority.

Both the NRC and the DoD acknowledge that DoD's remediation of radium and other unlicensed AEA material would be under both the AEA and CERCLA. The RIS generally describes approaches for managing this overlap of jurisdiction. The comprehensive remediation MOU provides the responsibilities and specific activities of both the NRC and the DoD for managing the overlap of jurisdiction in a manner that would reduce unnecessary dual regulation and associated costs and schedule impacts.

3. DoD remediation of unlicensed AEA material subject to the NRC regulatory authority

In addition to radium, at some sites DoD has also identified, and is remediating, other unlicensed AEA material subject to the NRC's regulatory authority. For example, strontium-90 can be comingled with radium in disposal areas, such as at the Navy's former Alameda Air Station in California. Apart from DoD's concerns about the NRC's jurisdiction of military radium, the issue of licensing the unlicensed AEA material needs to be resolved. The NRC staff recommends using the MOU approach described in this paper instead of licensing to provide a single and consistent path forward for addressing DoD's remediation of any unlicensed AEA material subject to the NRC authority. As DoD is required to remediate all radioactive material using the CERCLA process, this appears to be the most efficient way to resolve the potential for dual regulation of the remediation of this other AEA material as well as for radium.

4. Potential for reopening of completed military remediation and impacts on redevelopment.

The fact that a remedial action has been taken and concluded by DoD does not negate subsequent NRC or Agreement State jurisdiction over the site when it is transferred to a non-federal owner, if the NRC or the Agreement State suspects or confirms the presence of radioactive material subject to its regulatory authority. In order for the NRC to ensure that no further NRC action is necessary at a military site or facility in a non-Agreement State post-remediation and after transfer of the property to a non-federal owner, some level of NRC involvement is needed during DoD's CERCLA remediation of these sites. This would avoid the NRC having to take a licensing action against the new owner after property transfer and "reopen" the completed DoD remediation. It might also assist a State in the NRC's Agreement State program in deciding whether a licensing action by the State would be necessary. However, the NRC cannot prevent an Agreement State from taking an action under its compatible regulations or applicable requirements. Thus, the NRC involvement is intended to support finality and avoid dual regulation that would result from "reopening" the completed DoD remediation. Avoiding "reopening" would also avoid impacts on potential redevelopment plans of future non-federal owners.

5. Independent federal oversight to ensure protection of public health and safety.

The NRC believes that independent and consistent federal oversight of DoD's remediation is needed for those sites without the Environmental Protection Agency regulatory oversight. The NRC's monitoring of these sites will add confidence that the DoD's remediation of the radioactive material has been conducted and completed so that future use by the public will be safe. The NRC monitoring makes available the staff's technical expertise and years of experience with the decommissioning of a full range of nuclear facilities.