

Implementation of the NRC / EPA MOU on Decommissioning Sites

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Abstract – *The U.S. Nuclear Regulatory Commission (NRC) and the U.S. Environmental Protection Agency (EPA) entered into a Memorandum of Understanding (MOU) on October 9, 2002, on Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites. The MOU continues the 1983 EPA policy that EPA will defer Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authority over NRC decommissioning sites, unless requested by NRC. A process implementing the MOU through letter correspondences between the NRC and EPA has been ongoing for more than 1 ½ years. From this experience, some lessons have been learned, and some improvements have been made to the process. However, a detailed consultation under the MOU has not yet been completed (the first is ongoing at the time of this conference), and issues have arisen through the process that have made licensees doubtful of the ability of the MOU process to prevent “dual regulation” for licensees undergoing decommissioning in accordance with NRC’s regulations. NRC and EPA are working through the first detailed consultation and are hopeful the process will alleviate the concerns of licensees about the MOU process*

I. INTRODUCTION

The U.S. Nuclear Regulatory Commission (NRC) and the U.S. Environmental Protection Agency (EPA) entered into a Memorandum of Understanding (MOU) on October 9, 2002, entitled, Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites. (Ref. 1) The signing of the MOU ended months of negotiations between the Agencies on the content and process to be included in the MOU, which was developed in response to the House Subcommittee on Veterans Affairs and Housing and Urban Development, and the Independent Agencies Committee on Appropriations House Report (HR 106-286) covering EPA’s FY 1999 Appropriations /FY 2000 budget request.

The MOU continues the 1983 EPA policy (48 FR 40658) (Ref. 2) that EPA will defer Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authority over NRC decommissioning sites, unless requested by NRC. The MOU identifies the criteria under which NRC will consult with EPA on sites undergoing decommissioning under NRC authority, and outlines the process under which the NRC will consult with the EPA. The intent of the process established under the MOU is to minimize the need for so called “dual regulation,” where EPA is required to respond under CERCLA to conditions at a site cleaned up to criteria approved by the NRC under the authority of the Atomic Energy Act (AEA).

II. MOU PROCESS

The MOU includes three criteria under which NRC will consult with EPA on sites undergoing

decommissioning. The MOU states that EPA will defer completely to NRC authority without the need for consultation, except where any of the three criteria are triggered. Table 1 provides a brief description of the three criteria which if triggered will result in EPA/NRC consultation on an NRC-regulated decommissioning site.

Table 1

NRC/EPA MOU Triggers:

- 1) Groundwater contamination exceeds EPA’s Maximum Concentration Levels (MCL’s);
- 2) Site proposed for restricted (10 CFR 20.1403) [or alternate (10 CFR Part 1404)] release;
- 3) Soil radionuclide levels exceed values in Table 1 of the MOU.

After entering in the MOU with EPA, NRC staff worked with the Commission via two Commission Policy Papers [SECY-03-0112 and SECY-03-0206 (Refs. 3&4)] and their associated Staff Requirements Memoranda (Refs. 5&6) to establish the process for implementing the MOU with EPA. The process includes 3 types of communication with the EPA, depending on the stage an NRC site is in the regulatory process for decommissioning.

A Level 1 Consultation will occur when NRC begins the review of a newly submitted Decommissioning Plan (DP) or License Termination Plan (LTP), and one of the triggers is met. Level 1 Consultation provides an opportunity for early EPA involvement on a site which

potentially involves cleanup levels which do not meet the criteria for continued EPA CERCLA deferral. The process for Level 1 Consultation includes a minimum time period (120 days) provided to the EPA to review the DP or LTP and provide comments to the NRC. Consultation at this early stage provides for a coordinated and consistent implementation of the both the NRC's responsibilities under the AEA and EPA's CERCLA responsibilities so that, if necessary, a coordinated approach to remediation may be undertaken by the party undergoing decommissioning that will avoid the need for "dual regulation" under both laws.

A Level 2 Consultation will occur when a party undergoing NRC-approved decommissioning who already had an approved DP or LTP with the NRC when the MOU was signed, completes remedial activities, and the residual radioactive conditions to remain on the site triggers one of the MOU criteria (as reported, for example, in the Final Status Survey Report). The implementation process approved by the Commission for Level 2 Consultation does not specify a minimum time to be provided to EPA for consultation, but staff will endeavor to provide the maximum possible time for such consultation between when the party undergoing decommissioning declares that remedial activities are completed and the NRC approves completion of the decommissioning, or the license is terminated.

Staff recognized that several sites with approved DPs or LTPs undergoing decommissioning when the MOU was signed would have required Level 1 Consultation if the DP or LTP had been submitted for review after the MOU was signed. Therefore, in the spirit of the intent of the process described in the MOU, a 3rd type of interaction was established with EPA, a Notification Letter. A Notification letter will inform EPA of the existence of such a site where Level 1 Consultation would have been necessary, but does not ask for consultation. It is recognized that these sites are still eligible for Level 2 Consultation, if necessary, so NRC is only informing the EPA of the existence of these sites.

III. IMPLEMENTATION STATUS

As of May 10, 2005, the implementation of the MOU had not involved any Level 1 or Level 2 Consultations. The only interactions under the MOU that had occurred were Notification letters. Table 2 shows the Notification letters that were sent to the EPA informing them of sites undergoing decommissioning that would have triggered Level 1 Consultation if the DP or LTP had been submitted after the MOU was signed.

<u>Date</u>	<u>Site</u>
Mar 4, 2004	Saxton Nuclear Station, PA Kirtland Air Force Base, NM Connecticut Yankee, CN
Oct 27, 2004	Kaiser Aluminum, OK Kerr-McGee, Cimarron, OK Union Carbide Corporation, TN

At the time this paper was being written, however, one licensee who had completed decommissioning activities was about to request license termination, and one of the MOU triggers would be met for the conditions of residual radioactivity remaining at the site. Therefore, when the paper is presented at the ANS Conference in August 2005, a Level 2 Consultation will have begun on this site.

IV. EPA COMMENTS

EPA responded to each of the Notification letters sent to them by the NRC with comments, in the same spirit of the MOU under which NRC sent the Notification letters. The EPA understood that consultation was not being requested, but provided comments on topics of concern based on the information provided to EPA in the Notification letters. The comments were meant to represent the kinds of comments that would be provided for a Level 1 or 2 Consultation. Three topics were addressed in one or more of the Notification letters:

- 1) Land Use – EPA's letter(s) said, "NRC should consider determining if the reasonably anticipated land for the site is industrial/commercial." EPA refers NRC to CERCLA guidance on *Remedy Selection and Institutional Controls (Refs. 7&8)*.
- 2) Modeling – EPA's letter(s) said, "NRC should consider determining if the use of site-specific parameters were justified in the modeling of the site." EPA refers NRC to CERCLA guidance on *Radionuclide Remediation Goals (Ref. 9)*.
- 3) Groundwater – EPA's letter(s) said, "In EPA's view, a strategy should be developed for the remaining ground water contamination in the event the planned source control remedy does not reduce contamination in ground water to MCLs. EPA refers NRC to CERCLA guidance on

Strategy and Treatment of Contaminated Ground Water (Ref. 10).

The NRC acknowledged receipt of the comments to the Notification letters, but did not respond to any of the specific comments since each of the sites will undergo a Level 2 Consultation if necessary when the decommissioning activities are completed at the site.

IV. IMPLEMENTATION ISSUES

The Notification letters sent to EPA, and the comments on them sent by the EPA have resulted in a few implementation issues. These issues are summarized briefly in Table 3.

Table 3

MOU Implementation Issues

- 1) Notification letters don't include enough information;
- 2) Notification letters unintentionally create issues not associated with the MOU;
- 3) Licensees not convinced that "finality" will be achieved through MOU process.

The issue of the Notification letter not containing enough information arose in the case where a licensee requested that additional information about the remedial actions and the interactions with the State regulator which had already been completed be included in the Notification letter. NRC did not agree to this request, and the licensee believes that the additional information would have been appropriate to include at the time of Notification rather than waiting and including it in a Level 2 consultation later.

The issue of the Notification letter unintentionally creating issues not associated with the MOU arose because NRC included information about three licensee's sites in 1 letter, and the implication that these sites could be related in some significant way other than just by the MOU Notification process created sensitivities for one of those licensees.

The issue that "finality" will not be achieved with the MOU process has been expressed more than once by licensee's and industry groups representing licensee's undergoing decommissioning. Their observations to date lead them to believe that regardless of the consultation process that will take place under the MOU, that NRC and EPA will not be able to conclude that "dual regulation" will not be

imposed at a site undergoing decommissioning under NRC authority, in the circumstance where the MOU criteria are triggered and following completion of Level 2 Consultation.

NRC has implemented changes to the implementation process, particular the NRC Communications Plan, which it hopes will address the first two issues for any future Notification or Consultation letters that are sent to EPA.

With respect to the third issue, NRC and EPA both believe that any changes to the MOU or to implementation process would be premature at this time because neither a Level 1 or Level 2 Consultation has been completed (However, as noted above, a Level 2 Consultation will be going on at the time of the ANS Conference at which this paper is presented). Based on an exchange of preliminary information concerning the site that is the subject of this first Level 2 Consultation, both EPA and NRC are hopeful that, at the end of the Consultative process, "finality" will be apparent for this licensee at the time its NRC license is terminated.

IV. CONCLUSIONS

The NRC and EPA entered into the MOU on *Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites* in October 2002 to prevent "dual regulation" of sites undergoing decommissioning under NRC authority. The implementation process under the MOU has gone smoothly between the two Agencies, although some issues have arisen for licensees. NRC hopes that the Level 2 Consultation process being undertaken at the time this paper is delivered at the ANS conference will engender confidence in licensees, as well as the EPA and NRC, that "finality" can be achieved for sites that are working hard to clean up their sites according to NRC requirements.

REFERENCES

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