

May 6, 2013

Ms. Rebecca Clark, Director  
Division of Assessment and Remediation  
Office of Superfund Remediation  
and Technology Innovation  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Mail Code: 5204P  
Washington, DC 20460

SUBJECT: RESPONSE TO RECOMMENDATIONS REGARDING THE  
DECOMMISSIONING OF THE FORMER UNITED NUCLEAR CORPORATION  
NAVAL PRODUCTS SITE IN NEW HAVEN, CONNECTICUT

Dear Ms. Clark:

Thank you for your March 27, 2013, letter that outlined the U.S. Environmental Protection Agency's (EPA's) views regarding the decommissioning of the former United Nuclear Corporation Naval Products (UNC Naval) Site in New Haven, Connecticut. The U.S. Nuclear Regulatory Commission (NRC) consulted the EPA about the decommissioning of the UNC Naval site because the proposed Derived Concentration Guideline Levels (DCGLs) in the Decommissioning Plan (DP) Addendum, dated July 5, 2012, for one radionuclide, exceeded the soil concentration values in Table 1 of the 2002 "Memorandum of Understanding (MOU) between NRC and EPA on Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites." In your letter, you stated:

In EPA's view, if the licensee is unable to meet the Table 1 values for residential, NRC should consider the use of a more restricted land use, such as industrial, and appropriate institutional controls. In addition, NRC should consider determining if the use of site-specific parameters was justified in modeling at this site. The use of site-specific parameters would not alter NRC's obligation to possibly trigger a Level 2 consultation, if Table 1 soil values were found to be exceeded after the Final Status Survey measurements. If a Level 2 consultation is needed, NRC should furnish any site-specific parameters used and their rationale for allowing their use during the dose assessment for the site, in order to facilitate EPA offering its views with a more accurate estimate of the risks posed by residual contamination at the site.

NRC performed an extensive review of the DP Addendum for the UNC Naval site and carefully evaluated the dose assessment methodology and parameters to ensure that dose estimates were adequately supported. In most cases, NRC prefers to use site-specific parameters to ensure that the most accurate dose estimates are made. Due to the complexity of the UNC Naval site, it is not clear that default screening parameter values would always produce the most accurate dose estimates.

The NRC staff has concluded that the proposed DCGLs contained in the DP Addendum are consistent with Title 10 of the Code of Federal Regulations (CFR), Part 20, Subpart E. Specifically, UNC Naval proposes to remediate the site to meet the requirements in 10 CFR Part 20, Subpart E for unrestricted use, using site-specific DCGLs based on the most conservative of the dose scenarios evaluated. For this site, the most conservative scenario evaluated was the residential scenario. As such, the doses to the average member of the critical group at the UNC Naval site will comply with NRC's criteria in 10 CFR Part 20, Subpart E, which stipulates an all-pathways dose criteria of 0.25 millisieverts per year (25 millirem per year) and that doses be as low as is reasonably achievable. The 10 CFR Part 20 dose criteria are fully protective of public health and safety, and the NRC staff believes that the use of site-specific parameters has resulted in the most accurate estimate of the doses from residual radioactivity at the site.

In your letter you indicate that it is your understanding that the future land use is unlikely to be residential. Although the current property has a commercial use, we cannot rule out future residential usage because there are residential properties adjoining the site. As indicated above, the DCGLs have been developed using conservative dose scenarios that bound the use of the land as residential and meet the NRC regulatory criteria for release for unrestricted use.

Following site remediation activities, NRC staff will review the information in the Final Status Survey (FSS) reports and compare the levels of residual radioactivity to the MOU trigger levels. If the FSS measurements exceed the trigger levels in the MOU, NRC staff will contact your office pursuant to the MOU, and provide additional information on residual concentrations and land use to facilitate EPA offering its views on the decommissioning of this site.

If you have any questions regarding this letter or the decommissioning activities at the UNC Naval site, please contact Andrew Persinko at (301) 415-7479 or via email at [Andrew.Persinko@nrc.gov](mailto:Andrew.Persinko@nrc.gov).

Sincerely,

**/RA/**

Larry W. Camper, Director  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs

Docket No.: 07000371 (Retired)  
License No.: SNM-368 (Terminated)

cc: Robert Bonito, General Manager UNC  
S. Walker, USEPA  
E. Wilds, State of Connecticut

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