



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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February 15, 2012

Department of the Army
Developmental Test Command
ATTN: Gurvis Davis
ATEC/DTC/YPG Radiation Safety Officer
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SUBJECT: REQUEST FOR ADDITIONAL INFORMATION

The U.S. Nuclear Regulatory Commission (NRC) has completed the technical review of the Department of the Army, Yuma Proving Ground renewal application of NRC License SMB-1411 dated August 18, 2011, and additional information regarding decommissioning release criteria is needed to complete the renewal process. Please provide the following information within 30 days of receipt of this letter. Make reference to mail control number 576010 when providing your response.

1. On page 49 of 77, Item 10, Paragraph 5.b.(9)(c) states that guidance on radioactive contamination release criteria for decommissioned facilities is available in NUREG-1757. Based on this statement, the NRC assumes that you are referring to the guidance for release criteria provided in NUREG-1757, Volumes 1 and 2. Specifically, Section 15.11.1.1 of NUREG-1757, Volume 1, Revision 2, references NRC Regulatory Guide 1.86. This Regulatory Guide provides the NRC-accepted surface contamination criteria. In addition, Appendix B of Volume 1 refers to the NRC's screening criteria for release of soils and building surfaces. Furthermore, site-specific release criteria can be calculated using the guidance provided in NUREG-1757, Volume 2, Revision 1.

However, Paragraph 5.b.(9)(a) states that in the absence of other regulatory or advisory guidance, a surface is contaminated if either the removable or total radioactivity is above the levels in Table 2 (page 51 of 77). It is NRC's understanding that Table 2 values are based on Surface and Volume Clearance Standard ANSI/HPS N13.12-1999.

The NRC staff notes that the screening levels listed in Table 2 are higher than the criteria listed in Regulatory Guide 1.86. For this reason, please explain when Table 2 may be applicable and why Table 2 values should be used in lieu of Regulatory Guide 1.86 criteria. An alternative would be to remove Table 2 from the application and to adhere to the values listed in Regulatory Guide 1.86.

2. The Environmental Radiological Monitoring Plan, Section 7.3.1, refers to action levels for sediment samples. You provide three values: 35, 100, and 300 picocuries per gram of depleted uranium. It appears that these values originated from the NRC's 1981 guidance for disposal or onsite storage of thorium or uranium wastes from past operations (46 *Federal Register* 52061). The NRC recommends that licensees use dose modeling or derived concentration guideline levels for release of properties from NRC licenses. If you elect to free-release properties previously contaminated with depleted

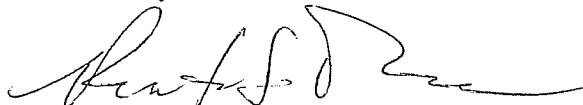
uranium, the action levels provided in Section 7.3.1 may not be acceptable for use as release criteria without further justification. To release properties for unrestricted use, you should use the guidance provided in NUREG-1757, Volumes 1 and 2. You are requested to clarify the Environmental Radiological Monitoring Plan and/or Section 5.b.(9) of Item 10 to ensure that the action levels listed in the Plan should not be used to release a property without further NRC or Army evaluation.

3. In the Environmental Radiological Monitoring Plan, Sections 2.3 and 6.3 (pages 60 of 77 and 68 of 77), you committed to conduct isotopic analyses of soil, sediment, and air samples. You elected to use uranium-238 as a surrogate radioisotope for air sampling. The wording of the Plan suggests that you will compare the isotopic soil and sediment sample results to the action level of 35 picocuries per gram of depleted uranium. The comparison of isotopic sample results to an action level for depleted uranium is not clear, in part, because each isotope may have different release criteria. For sediment and soil samples, please clarify the criteria or action levels you plan to use for comparison to these isotopic sample results. For example, you may elect to use a surrogate radionuclide for comparison to the isotopic sample results, similar to the action level established for air sampling.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Thank you for your cooperation.

Sincerely,



Roberto J. Torres, Senior Health Physicist
Nuclear Materials Safety Branch B

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License: SMB-1411
Control: 576010

CC: Department of the Army Commander
U.S. Army Yuma Proving Ground
Yuma Proving Ground, Arizona 85365-9124

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From: Torres, RobertoJ
Sent: Wednesday, February 15, 2012 4:46 PM
To: 'gurvis.davis@us.army.mil'
Subject: Request for additional information letter
Attachments: Letter dated 2-15-2012.pdf

The attached letter is being mailed out to you today.

PLEASE NOTE OUR NEW ADDRESS AND NEW PHONE NUMBER

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