

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

April 17, 2020

David J. Clark Lead Remedial Project Manager Former Naval Station Treasure Island Naval Facilities Engineering Command Navy BRAC PMO West 33000 Nixie Way Bldg 50, 2nd floor San Diego, CA 92147

SUBJECT: TECHNICAL EVALUATION REPORT REGARDING U.S. NAVY DRAFT FINAL STATUS SURVEY REPORT FOR NON-TIME CRITICAL REMOVAL ACTION FOR SOLID WASTE DISPOSAL AREAS WESTSIDE DRIVE, BAYSIDE DRIVE, AND NORTH POINT DRIVE INSTALLATION RESTORATION SITE 12 (PHASE III), FORMER NAVAL STATION TREASURE ISLAND, SAN FRANCISCO, CALIFORNIA

Dear Mr. Clark:

I am writing to provide you with the U.S. Nuclear Regulatory Commission (NRC) staff's technical evaluation report regarding the U.S. Navy's *Draft Final Status Survey Report for Select Areas within the Excavation Boundary Non-Time Critical Removal Action for Solid Waste Disposal Areas Westside Drive, Bayside Drive, and North Point Drive Installation Restoration Site 12, Former Naval Station Treasure Island, San Francisco, California* (hereafter, the Draft FSS Report; available in NRC's Agencywide Documents Access and Management System [ADAMS] at Accession Number ML19031B261). The purpose of the NRC staff's review is to ensure the U.S. Navy's remedy meets the NRC dose criteria for unrestricted use, 25 millirem per year (mrem/yr) (0.25 millisieverts per year [mSv/yr]), set forth in Title 10 of the *Code of Federal Regulations*, Part 20, Section 1402 (10 CFR 20.1402). The results of the NRC staff's evaluation are summarized below and are discussed in further detail in the enclosure.

The NRC's role at Installation Restoration Site 12 is consistent with the NRC's monitoring approach defined within the Memorandum of Understanding (MOU) between the NRC and the U.S. Department of Defense (DoD), executed on April 28, 2016 (hereafter the NRC/DoD MOU; ADAMS Accession Number ML16092A294). Under this approach, the NRC staff prepares monitoring reports with the results of its review and provides DoD with these reports and any written comments. The purpose of the NRC's monitoring is to ensure that DoD's remedy meets the NRC dose criterion for unrestricted use, 25 millirem per year (mrem/yr) (0.25 millisieverts per year [mSv/yr]), set forth in Title 10 of the *Code of Federal Regulations*, Part 20, Section 1402 (10 CFR 20.1402). The Navy's responsibility for meeting any other relevant federal and/or State regulatory requirements is independent of this NRC review.

The NRC staff and its contractor, Oak Ridge Associated Universities, reviewed the Draft FSS Report and determined that there is reasonable assurance that residual radioactivity in the Site 12 solid waste disposal areas (SWDAs) Bayside and Northpoint would conform to the 25-mrem/yr (0.25-mSv/yr) dose criterion for unrestricted use in 10 CFR 20.1402. This determination does not apply to identified areas to be investigated during future SWDA phases (i.e., SWDA Westside and areas of SWDAs Bayside and North Point sidewalls facing Perimeter Road and a section along North Point Drive with visible debris). This determination is based on:

- the Navy's demonstration that the sensitivity of the high-density radiation surveys can identify low-level radiological objects (LLROs) at depths within the fill of up to 3 feet (0.9 meter) below ground surface;
- (2) the Navy's bounding dose assessment resulting in a maximum plausible dose due to the maximum observed Ra-226 concentration of 5.1 mrem/yr (0.051 mSv/yr); and
- (3) NRC's confirmatory modeling of plausible exposure scenarios and maximum doses of less than 9 mrem/yr (0.09 mSv/yr) for potential LLROs that may not have been investigated and remain below excavation boundaries.

The staff has no further comments on the Draft FSS Report. However, NRC staff recommends, as an as-low-as-reasonably-achievable (ALARA) best practice due to the isolated occurrence of LLROs that have been found to date and the inability to perform in-situ surveys of survey units with water intrusion, that the Navy consider performing additional scans of the accessible areas after significant soil disturbance as development (e.g., excavation activities) of the site occurs. Performing additional scans as development occurs will enhance confidence that any LLROs brought to the surface during development activities will be identified and properly addressed.

In accordance with 10 CFR 2.790 of the NRC's Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders, a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of ADAMS. ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

I will contact you in the near future to answer any questions you may have regarding the technical evaluation report, but if you have any immediate questions, please contact me at (301) 415-0140 or at Christopher.Grossman@nrc.gov.

Sincerely,

Christopher Grossman, Project Manager Low-Level Waste and Projects Branch Division of Decommissioning, Uranium Recovery and Waste Programs Office of Nuclear Material Safety and Safeguards

Enclosure: Technical Evaluation Report

REGISTERED LETTER – RETURN RECEIPT REQUESTED

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