



Department of Toxic Substances Control

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Secretary for
Environmental
Protection

October 26, 2010

Mr. Keith Forman
Department of the Navy
1455 Frazee Road Suite 900
San Diego, CA 92108-4310

COMMENTS TO DRAFT PIER DEMOLITION WORK PLAN, HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Dear Mr. Forman:

The Department of Toxic Substances Control (DTSC) has received and reviewed the Pier Demolition Work Plan, Hunters Point Shipyard, San Francisco, California, dated September 21, 2010 (Draft Pier Demo WP). The Draft Pier Demo WP describes the actions that will be conducted to support demolition of wooden structures that are potentially radiologically-impacted at the Submarine Piers B and C, the wooden portion of the submarine quay wall, the wooden portion of Berths 64, 61, and Wharf No. 2 located in Parcel F at Hunters Point Shipyard.

The DTSC's comments to the Draft Pier Demo WP are presented below. Comments from the California Department of Public Health – Environmental Health Branch (CDPH-EMB) are presented in the attached memorandum to this letter. Based on our review, DTSC has the following comments:

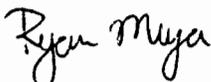
- (1) General comment. Whenever the text references coordination with “appropriate BCT member(s)”, the text should instead be modified to generally coordinate with the BCT.
- (2) Section 2.1 – Site Description and History. Please provide a more detailed summary of the historical uses of each of the specific work areas targeted in the Draft Pier Demo WP (i.e. sandblasting, decontamination associated with Operation Crossroads, etc.) based on the currently available information.
- (3) Section 2.6 – Radiological Characteristics. Given that all structures to be demolished are considered potentially radiologically-impacted, please list the specific potential radionuclides of concern associated with this project.

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- (4) Section 2.9 – Previous Radiological Investigations. Last paragraph. The text references Figure 1-1 as presenting radiologically-impacted areas and buildings based on the previous radiological investigations. However, Figure 1-1 does not present this information and instead presents parcel boundaries and reuse areas. Please either add the specified information into the current figure or provide an additional figure that presents the radiologically-impacted areas and buildings as specified.
- (5) Section 6.3 – General Demolition Approach. Please specify if there will generally be a field method employed to retrieve any large submerged objects from beneath the existing pier locations identified during the pre-demolition bathymetric survey or magnetometer survey. In addition, please estimate the approximate number of steel pilings that will be removed by the derrick barge during the current demolition project.
- (6) Section 6.11 – Waste Classification and Storage. Please specify, if known, the location(s) to which waste materials generated as a result of this activity will likely end up after being transferred to the Navy's waste disposal contractor.
- (7) Section 9.1 – Public Information. First sentence. Consideration should be given to either (a) remove the sentence given that the "Community Relations Plan" (or Community Involvement Plan (CIP)?) is currently undergoing revision / update, or (b) reference the appropriate document with author and date and include it in Section 10.0 if the statement is valid.

If you have any questions regarding these comments, please call me at (510) 540-3775.

Sincerely,



Ryan Miya
Senior Hazardous Substances Scientist
Brownfields and Environmental Restoration
Program - Berkeley

Enclosure

E-mail distribution:

Mr. Mark Ripperda, U.S. Environmental Protection Agency Region IX
Ms. Sarah Kloss, U.S. Environmental Protection Agency Region IX

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Mr. Ross Steenson, Regional Water Quality Control Board, SF Bay Region
Ms. Amy Brownell, City of San Francisco
Ms. Melanie Kito, Department of the Navy
Mr. James Whitcomb, Department of the Navy
Mr. Chris Yantos, Department of the Navy
Ms. Jacqueline Dunn, Department of the Navy
Ms. Tracy Jue, California Department of Public Health
Mr. Larry Morgan, California Department of Public Health
Ms. Leslie Lundgren, CH2M HILL
Ms. Kristine Enea, Community resident
Mr. Leon Muhammad, Community resident
Dr. Raymond Tompkins, Community resident
Ms. Diane Wesley Smith, Community resident
Ms. Marie Harrison, Greenaction
Mr. Alex Lantsberg, IBNA Boardmember
Mr. Matt Hagemann, TAG consultant



California Department of Public Health
MEMORANDUM

DATE: October 19, 2010

TO: Ryan Miya, Senior Hazardous Substances Scientist
San Francisco Peninsula Team Leader
Brownfields and Environmental Restoration Program - Berkeley Office
Department of Toxic Substances Control
700 Heinz Avenue
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FROM: Larry Morgan
Senior Health Physicist
Environmental Management Branch
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P. O. Box 997377
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A handwritten signature in black ink, appearing to read "Larry Morgan", is written over the typed name and address of the sender.

SUBJECT: Review of the Draft Pier Demolition Work Plan Hunters Point Shipyard, San Francisco, California Dated, September 10, 2010.

Upon the request of the Department of Toxic Substance Control, the California Department of Public Health (CDPH) reviewed documents associated with radiological issues regarding the Draft Pier Demolition Work Plan. Attached are comments from CDPH-EMB with respect to radiological issues regarding the Work Plan.

If you need further assistance please contact Tracy Jue of my staff at (916) 324-4804.

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Specific Comments

1. It is unclear specifically the boundaries or areas that the Navy is seeking unrestricted for demolitions structures for the Submarine Piers B and C, Submarine Quay Wall (Pier C Berth 55, Berth 61, Berth 64 and Wharf No. two. Please describe the specific areas or boundaries for each demolished structures that the Navy is seeking unrestricted release.
2. CDPH-EMB will also need confirmation soil samples from the soil dredged from the bottom of the bay around the piers and sediment from the storm drains.
3. Page 2-2, Section 2.4.1 "Submarines Piers B and C and page 2-3 "Wooden Portion of Submarine Quay Wall", Has the Navy investigated whether Buildings 129, 132 Submarine Pier B and C, Building 133 and Temporary Shed in Pier C Berth 55 radiological impacted?
4. Pages 2-7, Section 2.9, "Recent Radiological Investigations and Surveys" states The Submarines Piers B and C (Berths 55-58), Dry Docks 5-7 (Berths 61 and 64), quay wall, Parcel F Shoreline/Concrete Quay Wall and associated utility closure areas are all located within potentially radiologically impacted areas. However, there is no list of radionuclide of concern and no description conceptual model for each structure to be demolished. This section should summarize the relevant findings that led to each pier being classified as contaminated. At the very least, each pier should be listed along with its related contamination level and the isotopes of concern.
5. Page 5-10, Section 5.11, "'As Found' Radiological Survey at North Pier" states that a pre-demolition survey will be performed on the North Pier conducted with a M251 Radiological Scanning System or equivalent that will document external dose rates. It is recommended that the Navy collect soil samples to determine soil concentration as a background and survey the radiological controlled area with a detector that measures surface activity since background is based on surface activity (cpm) and soil concentration (pci/g) since the release criteria is based on soil concentration and surface activity. Also the SAP Worksheet #15 page 35 of 39 Appendix D lists Radiological Reference Limits as soil concentration and surface activity.

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6. Page 5-10, Section 5-12, "Radiological Control Area", which makes up a section of the North Pier will be considered impacted after surveying the demolished debris. A Class 1 survey may be required to release the North Pier area within the radiological control area.
7. Page 6-7, Section 6.9.2 Determination of Radiological Screening Criteria states, "MACTEC will perform a survey using a Ludlum Model 193-6 micro R detector or equivalent", per MARSSIM guidelines. It is recommended that the Navy conduct surveys with a radiation detector that measure surface activity (cpm) to measure adequately and quantify a surface activity since the release criteria is based on surface activity. The radiological screening criteria per MARSSIM are based on DCGL (Derive Concentration Guideline Levels) which is in units for surface activity (dpm/Cm²) or soil concentration (pCi/g).
8. Page 6-7, Section 6.9.3, "Radiological Screening", paragraph 1 states that only a small portion of the North Pier will be screened for radiological contamination. What isotopes are expected to be present, if any? What MARSSIM release limits will be used for these surveys? Why is only a small portion of the pier being sampled? How does this small section of the pier fulfill the requirements of MARSSIM?
9. Page 6-7, Section 6.9.3 "Radiological Screening", states that once the debris has been spread, the entire debris pile will be hand screened by waving a Ludlum Model 193-6 micro-R detector. The micro-R detector only measure exposure units and not surface activity. Per MARSSIM radiological screening is based on surface activity (dpm/cm²). It is recommended to use a radiological detector that measures surface contamination.
10. Page 7-10, Section 7.3, "Radiological Survey" states that after demolition of the pier a radiological survey will be performed. What contaminants will be expected, if any? And what MARSSIM contamination limits will be used? Also, all piers are stated as being contaminated, so what reasonable area can be surveyed to provide a sufficient background to pier surveys?
11. Page 7-11, Section 7.5, first paragraph states the scoping survey will identify radiological anomalies that may be present on the surface area such that the radiological data collected will support DON's radiological final status goal. Second paragraph states that ERS-JV will develop a Task Specific Plan. It would be prudent to write a remedial investigation

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plan and removal action completion report as stated in section 7-4. It is also recommended that the Navy follow MARSSIM guidelines Class 1 Final Status Survey if the demolition structures are impacted and selecting the number of media and scans for areas seeking free release. Since the Navy states in paragraph 3 that the Final Status Survey report will document "as left radiological conditions" the Radiological Health Branch of the California Department of Public Health may require a radiological license.

12. Appendix A, "Draft Radioactive Materials Management Plan, Pier Radiological Surveys and Removal", Page 4, "Demolition Activities", Second paragraph states, "All Debris will be spread one layer thick within the designated North Pier screening area and expose surface areas will be hand screened using a Ludlum Model 196-3 micro-R detector or similar detector". How will the Ludlum Model 196-3 micro-R detector be capable of measuring surface and subsurface contamination for the one layer thickness? How thick is a one layer?
13. Appendix A, Attachment A, "Radiological Screening of Demolition Debris" it is recommended to include a scan with a radiological instrument that measures surface contamination (cpm/dpm²). It also follows that the procedure detailed Section 5.1.1 Table 5-2 Criteria for Determining Radioactive Material Page 5 of 10 "Control of Radioactive Materials".
14. Appendix D, Draft Sampling and Analysis Plan Worksheet Number 17 "Sampling Design and Rationale" Page 54 of 93, As Found Radiological Scan Survey and Background Reference Survey should include a radiological detector that measures for surface contamination (cpm/dpm²) per MARSSIM release criteria is based on surface contamination.