



August 30, 1993  
File No. 2169.6031 (BMS)

Mr. Ray Ramos  
Code T4E1  
Western Division Naval Facilities Engineering Command  
900 Commodore Drive  
San Bruno, CA 94066-0720

**Subject: Parcel A Site Inspection Report, July 30, 1993, Radiologic Issues**

Dear Mr. Ramos:

Enclosed, please find the comments provided by the Department of Health Services (DHS) to the State Water Resources Control Board in support of the Interagency Agreement to provide technical oversight for radiologic issues at Hunters Point Annex. The comments will be sent to you by facsimile transmission today, August 30, 1993, and an original copy of the comments and this cover letter will be transmitted upon my receipt of the comment letter from DHS.

If there are questions about the content of the comments, please notify me and we will arrange a meeting as soon as possible.

Please direct your questions to me at (510) 286-4222.

Sincerely,

A handwritten signature in cursive script that reads "Barbara M. Smith".

Barbara M. Smith, Ph.D.  
Remedial Project Manager

**cc: Hunters Point Annex Radiologic Issues**

Mr. Jim Sullivan, NAVSTATI  
Ms. Roberta Blank, USEPA  
Mr. Cyrus Shabahari, DTSC  
Mr. Jack S. McGurk, DHS  
Ms. Amy Brownell, SFDPH

**cc: Hunters Point Annex Radiologic Issues**

**Commander**

**Mr. Jim Sullivan**

**Naval Base, San Francisco**

**Naval Station, Treasure Island**

**San Francisco, CA 94130-5018**

**Ms. Roberta Blank (H-7-5)**

**U.S. Environmental Protection Agency**

**75 Hawthorne Street**

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**Mr. Cyrus Shabahari**

**Department of Toxic Substances Control**

**700 Heinz Avenue, Building F, Suite 200**

**Berkeley, CA 94710**

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**Environmental Management Branch**

**Department of Health Services**

**714/744 P Street**

**P.O. Box 942732**

**Sacramento, CA 94234-7320**

**Ms. Amy Brownell**

**City and County of San Francisco**

**Department of Public Health**

**101 Grove Street, Room 207**

**San Francisco, CA 94102**

DEPARTMENT OF HEALTH SERVICES

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SACRAMENTO, CA 94234-7320



(916) 455-0498

August 30, 1993

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Ms. Barbara Smith  
Regional Water Quality Control Board  
San Francisco Bay Region  
2101 Webster Street, Suite 500  
Oakland, CA 95612

Dear Ms. Smith:

The Parcel A Site Inspection Report for Hunters Point Annex, dated July 30, 1993, has been reviewed. This review was conducted in response to the Request for Assistance, dated August 4, 1993. The enclosed comments provided to you are in support of the Interagency Agreement between the State Water Resources Control Board and the Department of Health Services.

If you have any questions concerning these comments, please telephone me at (916) 323-1167 or Fil Fong at (916) 324-1378.

Sincerely,

A handwritten signature in black ink that reads "Jack S. McGurk".

Jack S. McGurk, Chief  
Environmental Management Branch

Enclosure

cc: Cyrus Shabahari, DTSC  
John Adams, SWB  
Steve Dean, EPA  
Mike McClelland, WESTDIV

DEPARTMENT OF HEALTH SERVICES COMMENTS TO EXCERPTS FROM "PARCEL A  
SITE INSPECTION REPORT" ON HUNTERS POINT ANNEX DATED JULY 30, 1993.

The Department of Health Services has no reasonable justification to find Parcel A at Hunters Point Annex to be radiologically cleared. Therefore, the Department at this time will not be a party to any approval for the release of Parcel A to the public. This position is based on the following concerns which need to be satisfactorily addressed before we will continue this evaluation:

1. The Department conducted confirmatory soil sampling around Building 816 on August 13, 1993. We could have participated with the Navy in a split sampling program, if the Navy had coordinated their sample dates of May 17-18, 1993 with DHS. The DHS Sanitation and Radiation Laboratory estimates now that the results will be available in six weeks, approximately the first week of October. We will need to review these results as part of our evaluation for radiologic clearances.

2. Page 37, Section 4.3 PA-41 Radiation Investigations  
First paragraph, second line:  
".....; Building 818 was not investigated because it had no history of potential radiation contamination."

Building 818, in the Navy's Building List as of 30 June 1971 (P.W. DWG No. 16001-146), was detailed as the "Chlorinating Plant," used by Public Works. The Supervisor of Shipbuilding document, Use of Radioactive Materials at the U. S. Naval Radiological Defense Laboratory, dated December 11, 1978, did not show Building 818 as having been ever occupied by NRDL. In the Minutes for Summary of Parcel A Data Presentation, June 10, 1993, Building 818 was included in PA-41 but not in the discussion of Radiation Investigation. Why include Building 818 in this section? The inclusion of Building 818 in this section on Radiation Investigations is misleading and could raise unnecessary discussions on why this building was reported in this section of the document.

Delete or move this sentence about Building 818 from the section titled Radiation Investigations.

3. Page 38, Building 816

First paragraph, first sentence:

"Building 816,..... a van de Graaf..... and housed a radiochemistry laboratory."

A. "van de Graaf" is misspelled and should be written as Van de Graaff.

- B. DHS, in the June 8, 1993 written comments to the draft sampling plan for Building 816, and in the verbal comments of Mr. Fong, DHS, at the data presentation meeting on June 10, 1993, contradicted the statement that a radiochemistry laboratory was located at the Van de Graaff building. We understood at that time that these statements would be deleted from the revised documents. Yet we still find that this new document states that a radiochemistry laboratory was housed at Building 816.

A radiochemistry laboratory is a laboratory that is designed with engineering controls and reinforced with contamination control procedures for the use of significant quantities of radioactive material. In Building 816 there was a room with a chemistry hood with non-absolute filters that was used for the maintenance and cleaning of electronic components and for the handling of tritium targets. Mr Fong reiterated that, excluding tritium, there were no operations involving radioactive material at Building 816 that required contamination controls. Reporting that a working space or a laboratory in Building 816 was a radiochemistry laboratory can create unnecessary concerns about large quantities of radioactive material in this facility.

Radiochemistry, as an adjective, should be deleted.

4. Appendix G Building 816 Tritium Radiation Investigation  
Page 2:

2.1.1 Sampling Approach - First paragraph, last sentence

"Mr. Fong reviewed and approved....."

DHS understands that Mr. Fong reviewed and commented on the draft workplan. PRC collected the subject samples on May 17 & 18, 1993. A copy of the final sampling plan was provided to Mr. Fong by Mr. Emir Etush, PRC, on June 14, 1993. That is approximately a period of a month after the samples were collected. Mr. Fong has not provided any written approval or concurrence to this document, and, in fact, in this DOD program he is not authorized, unilaterally, to provide any written approval to any plan without coordination with the State Remediation Project Manager (RPM). There is no written approval of the Investigation of Tritium in Surface Soils and Paving Materials Surrounding Building 816 Workplan, dated June 10, 1993, by Mr. Fong.

Remove from this document, procedure or workplan any reference to approvals by the State. (See also, Page 12, last paragraph, first line.)

5. Appendix G, Page 4, Second paragraph, 4th sentence: "All samples were individually placed into gasketed, polyethylene screw top jars,....".

DHS provided written comments to the draft workplan of May 3, 1993. Major Concern #3 of the comments requested the justification of selecting "polyethylene over non-plastic sample containers for tritium." In subsequent telephone conversation on or about May 13, 1993 with WESTDIV staff at the RASO office, it was agreed that glass containers would be used for sampling tritium. Appendix G reported that the containers used for sampling were polyethylene or plastic jars.

Explain why these sample results should not be declared invalid and these soils be re-sampled.

6. Appendix G, Health Hazards of Tritium, Page 10-12:

This discussion on the contamination limits for tritium is not appropriate for the radiologic clearance of areas to the public. DHS will be evaluating radiologic clearance levels against the risk of carcinogenesis. Cancer risk based standard for radiologic concern is the most sensitive endpoint and may be equated on the same scale as risk from cancer due to other toxic substances. The discussion of other sites and standards will only serve to confuse the issue.

We suggest that you delete the discussion on the surface contamination limits based on other sites and standards.

The following questions were evolved in discussion with N. J. Parks, Ph.D, of the DHS Sanitation and Radiation Laboratory after his telephone conversations on August 19, 1993 with Mr. Nels Johnson, TMA-Eberline, Albuquerque:

7. Appendix G, Table 1, Page 7:

"MDA" is sometimes used in the profession of environmental radiochemistry as reporting minimum detectable activity and minimum detectable concentration. Since the number in this column represents concentrations (pCi/g, pCi/L), it will be better, if the head of this column is MDC (minimum detectable concentration) and list the appropriate lower limit of detection (LLD95).

8. Appendix G, Table 1, Page 8, Footnote a:

"Reported value is less than the negative of its 2 sigma counting error."

This footnote is confusing. Please rephrase this statement.

9. Appendix G, Appendix C Formula Used By TMA/NORCAL To Calculate MDA For Tritium:

- A. What confidence level is this MDA? Is this the standard LLD-95 as suggested by the 4.66 factor usually used to preclude Type I and Type II (e.g., false conclusion for activity presence and false conclusion for activity absence.)
- B. In the formula presented for MDA, the equation numerator of Blank CPM x Count Time, each factor needs a super factor of 1/2 or these factors need to be placed under a square root bracket.
- C. In the formula equation, the denominator needs the factor of count time.