



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

N00217.000132
HUNTERS POINT
SSIC NO. 5090.3

February 3, 2000

Cmdr. Ray Fong
Department of the Navy
Radiological Control Office
Pearl Harbor Naval Shipyard &
Intermediate Maintenance Facility
667 Safeguard Street, Suite 100
Pearl Harbor, Hawaii 96860-5033

RE: EPA Review and Comment, Historical Radiological Assessment, Hunters Point Annex, Draft, Volume I, Naval Propulsion Program, 1966-1995

Dear Cmdr. Fong:

EPA has completed its review of the above referenced document. Our comments are provided in the enclosed memorandum prepared by Mr. Steve Dean.

Should you have any questions about the comments included in the enclosed memorandum, please contact Mr. Dean at (415) 744-2391. To discuss other technical issues relating to Hunters Point Shipyard you can contact me at (415) 744-2409 or Ms. Sheryl Lauth at (415) 744-2387. Thank you.

Sincerely,

A handwritten signature in cursive script, appearing to read "Claire", followed by a horizontal line.

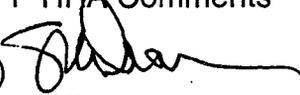
Claire Trombadore
Remedial Project Manager

cc: Steve Dean, EPA
Sheryl Lauth, EPA

January 10, 2000

MEMORANDUM

SUBJECT: Hunters Point Annex NNPP HRA Comments

FROM: Steve M. Dean (SFD-8-B) 
Superfund Technical Support Team

TO: Claire Trombadore (SFD-8-2)
Navy Section

I have reviewed the Historical Radiological Assessment for Hunter Point Annex. I have comments:

Section 2.3.3, Page 2-4: A laboratory sample containing cesium-137 was accidentally dropped in a parking lot outside of Building 364 some years ago. Remediation of that spill is still ongoing.

Section 4.2.2, Page 4-4 & Section 4.2.3, Page 4-5: While both tritium and carbon 14 are generated naturally by cosmic neutrons they are still radionuclides listed as hazardous materials in the NCP and are considered by CERCLA to be Group A carcinogens. Tritium and carbon 14 releases from manmade sources to the environment are CERCLA releases. The Navy should provide more convincing arguments than "dilution is the solution" as the appropriate disposal practices for tritium and carbon 14 in this and other NNPP HRAs.

Section 5.4, Page 5-16: Actually the typical home smoke detector contains one microCurie of americium-241, a radionuclide which is considerably less toxic than cobalt-60. Making this comparison is very misleading. Co60 is 440 times more carcinogenic than Am241 per unit of activity based on a contaminated residential site lifetime cancer risk comparison.

Table 6-2, Page 6-8: What explanation can the Navy provide of why no enhanced analyses were performed at the locations designated from 1978 through 1986?

Table 6-3, Page 6-9: Why are the average concentrations of Co60 consistently between 0.3 and 0.45 pCi/g over the sampling period from 1978 to 1995? The half-life of Co60 is 5.3 years so there should have been a substantial decline in its sediment concentration over 17 years.

Table 6-5, Page 6-15: This table has several data gaps: Averaging the data from just two samples, footnote (b), makes the data point under represent the bioaccumulation of Co60. Can the Navy offer an appropriate explanations of why no mollusks or

crustaceans were sampled in 1983, footnote (c), or why no data is available, footnote (d) for 1980?

Page 6.2, Page 6-17: The dredge materials disposed of in the industrial landfill likely contain radioactive materials accidentally dropped, or intentionally thrown, overboard from ships berthed at HPA. Just recently huge metallic masses some weighing 5 tons or more have been uncovered at Mare Island Naval Shipyard. These were formed in dredge ponds when the heavy objects precipitated out of the dredge material and formed these masses. Radioactive devices are easily detectable on the surface of these masses which were obviously discarded overboard along with other metal objects such as welding rods, hand tools, metal scraps. The radioactivity levels of the embedded radium devices are well above background.

If you have any questions or comments please contact me at (415) 744-2391.

cc: Sheryl Lauth