RE: Complaint Involving Fraud and Abuse of Authority

Dear Inspector General:

This request is submitted on behalf of Public Employees for Environmental Responsibility (PEER) concerning inaccurate statements made by the Naval Facilities Engineering Command concerning current conditions at the Hunters Point Naval Shipyard (HPNS) regarding dangerous amounts of high-level radiation waste.

We believe that these inaccurate statements were made intentionally. Further, these statements bear on significant matters of public health. In addition, we believe these statements seriously undermine public trust in the credibility of the U.S. Navy (Navy) as it relates to environmental concerns.

Background
HPNS is a Superfund site in San Francisco which was used by the Navy for decontamination of radioactively contaminated ships from nuclear weapons testing in the Pacific, as well as research with large quantities of radioactive materials at the Naval Radiological Defense Lab. This resulted in widespread contamination of the area with radionuclides.

HPNS consists of parcels titled A, B, C, D, and so on. The Navy is retesting HPNS because of the Tetra Tech data falsification scandal. The U.S. Environmental Protection Agency (EPA) found evidence of falsification, fabrication, or other problems with measurements by Tetra Tech, the Navy contractor hired to carry out initial measurements of the Hunters Point Naval Shipyard, in 90-97% of the survey units in the HPNS parcels reviewed by EPA.

The Navy began retesting HPNS Parcel G first, where evidence of data problems had been found in 97% of the survey units. According to statements by the Navy, Parcel G is slated to be declared completely remediated and transferred over to the custody of the City and County of San Francisco sometime during the current calendar year.

In an October 2021 “Frequently Asked Questions” and a briefing of the Hunters Point Citizens Advisory Committee, the U.S. Navy first publicly revealed that in its radiological field work on Parcel G that approximately “10% of samples indicate strontium-90 levels slightly above the
remediation goal.” These 23 soil samples from nine different trench units in Parcel G exceeded Sr-90 cleanup levels.

Sr-90 is the longest-lived major fission byproduct. Its 29-year half-life means that it can take hundreds of years to decay to negligible levels. Strontium-90 is a “bone seeker” that after entering the body is deposited in bones, bone marrow, blood, and soft tissues. Its presence in bones can cause bone cancer, cancer of nearby tissues, and leukemia.

**Complaint Summary**

Navy officials worked to improperly dismiss the public health significance of data about the Sr-90 exceedances and hide them from the public:

a. The Navy’s September 2021 briefing to the Mayor of San Francisco [ATTACHMENT I] included false information intended to mischaracterize the significance of the exceedances.

b. The Navy’s presentation to the Hunters Point Community Advisory Committee (CAC) on October 25, 2021 [ATTACHMENT II] completely failed to disclose the significance of Sr-90 exceedances inaccurately blaming them on the uncertainty of the measurements;

c. The Navy’s October 2021 “Timely Topic” FAQ Fact Sheet [ATTACHMENT III] was riddled with misstatements; and

d. The Navy’s August 22, 2022 Fieldwork Update to the CAC [ATTACHMENT IV] containing a chart showing nor Sr-90 readings exceeding cleanup standards and display several Sr-90 readings as below zero.

**Presentation to Mayor Breed**

In this presentation the Navy made the following representations that we believe are materially false:

“• Strontium levels measured to date are within regional background levels and below risk levels

• Navy chemists evaluated the Strontium data - laboratory procedures are likely causing ‘false positives’

• The Navy is adjusting the laboratory procedures to lower the detection limit, to increase measurement precision, and to reduce method uncertainty

• The Navy will reanalyze all past strontium samples with the updated method to confirm whether or not strontium is present”
Contrary to these statements, the measured levels were, in fact, exceedances, i.e., they were above both the Navy’s and the EPA’s risk-based remediation limits. They were not false positives. Nor were they within “regional background levels.” In addition, as detailed below, the Navy later made efforts to improperly skew Sr-90 background level calculations.

The subsequent Navy actions did not increase precision but just the opposite. Further, there was no credible “updated” confirmation method.

**Hunters Point 2021 CAC Presentation**

In its October 25, 2021 presentation to the CAC, the Navy presented a table entitled “strontium-90 Radiological Retesting for Soil HPNS Parcel G” with a large horizontal “Under Review” warning across it.

The table had an orange line representing the remediation goal. Instead of showing the 23 exceedances as points above the line, all exceedances were left off the chart.

**Timely Topic Fact Sheet**

In October 2021, the same month the Navy excluded all 23 Sr-90 exceedances in its presentation to the CAC, it released a “Timely Topic” FAQ about Sr-90 at Parcel G. The FAQ sheet asserted:

> “Strontium-90 lab results to date have not indicated levels considered a risk to human health or the environment.”

This statement is untrue, since 23 measurements were over the Navy’s own risk-based remediation limits.

The Navy FAQ also said that:

> “The U.S. Environmental Protection Agency (EPA) method for identifying strontium (EPA Method 905.0 MOD) will continue to be used.”

This, too, is inaccurate. The Navy made changes to the lab method but those changed deviated from the EPA protocol, rather than conforming to it.

**Hunters Point CAC 2022 Fieldwork Update**

At the August 22, 2022 HPS CAC meeting, the Navy distributed another chart with Sr-90 exceedances. This chart represented that no Sr-90 readings were above the remediation goal (RG), when in fact there were 23 readings above the remediation goal.

Further, in this chart, approximately half of the reported strontium-90 concentrations are shown as below zero. Needless to elaborate, readings below zero are an impossibility.
Navy’s Inflation of Background Values and Remediation Goals

Central to the Navy’s inaccurate statements is the contention that these Sr-90 samples were not really exceedances but were below background levels.

Background refers to the level of radionuclides that would be at the site absent any contaminating activity. For example, some radionuclides (e.g., uranium-238) appear in nature; others are spread globally from nuclear weapons fallout. However, local human activity, such as sandblasting radioactive ships brought back from atmospheric nuclear testing in the Pacific, would undoubtedly add radioactivity to the local environment.

At a Superfund site such as HPNS, the responsible party is not required to clean up below background levels. Thus, accurately determining what is a genuine background concentration of radionuclides (i.e., what would be there had the Navy never taken over the civilian Hunters Point Shipyard) is a key issue.

Inflating the background values is an illegitimate but most effective method for evading cleanup responsibilities. Inflating the remediation goals (raising the acceptable levels of contamination) has a similar evasive effect. At HPNS, the Navy did both.

For example, the Navy now uses a remediation goal for plutonium-239 of 2.59 pCi/g for a supposed residential standard, whereas EPA’s Preliminary Remediation Goal (PRG) Calculator gives a default value for residential cleanups of 0.445 pCi/g. For strontium-90, the Navy is using a remediation goal of 0.331 pCi/g, whereas the EPA PRG Calculator gives a value of 0.00477 pCi/g, nearly a hundred times lower.

The Navy’s stated background values for HPNS asserts an offsite background value for strontium-90 of 0.15 pCi/g and for plutonium-239/240 of 0.515 pCi/g. In a footnote, however, the Navy concedes, “EPA noted objections with the BTV for Pu-239 and Sr-90.”

The Navy took background measurements from the San Bruno Mountain to supposedly establish offsite background values for radionuclides. But the Navy did not detect Sr-90 in any of their measurements. Instead of collecting new samples using a detection limit capable of seeing background, the Navy declared the offsite background value for Sr-90 in soil to be 0.15 pCi/g.

This 0.15 pCi/g value is not a measured value but instead is the maximum detection limit used by the Navy in its measurements during the soil study, a very poor limit of detection that is incapable of seeing strontium-90 at the levels present.

The Navy also did not detect Pu-239/240 in any of their background measurements. Again, rather than using actual measured values, the Navy instead used the maximum detection limit to establish a BTV: 0.515 pCi/g, also a very poor quality detection limit incapable of seeing plutonium at the levels which are actually present.

EPA Objections
In internal emails between the EPA and the Navy obtained by PEER under the Freedom of Information Act, EPA officials objected to Navy attempts to declare that the initial exceedances were not valid data. EPA explicitly wrote the Navy:

“[t]he previous strontium-90 results are valid data. It's inaccurate to suggest the data were not precise enough. EPA has been clear that in the absence of convincing evidence, we cannot support using the new data to supersede existing results.”

That same EPA official wrote the Navy objecting to a draft public statement, noting that from a communications perspective:

“It reads as if the Navy is suppressing data results it doesn’t like in regards to strontium-90 data.”

Rather than retract its false statements, from all appearances the Navy doubled down on prevarications.

**Conclusion**

PEER is requesting that the Navy Office of Inspector General review these charges. If it determines that these concerns are accurate, we request that your office:

- Recommend the Navy publicly retract all inaccurate statements about the HPNS cleanup;
- Identify by name the official(s) responsible for issuing these materially false statements to the public and local elected officials and recommend appropriate disciplinary action; and
- Determine if changes in Navy procedure could prevent recurrence of similar events.

PEER has additional supporting documents and expert witnesses which we can make available to you, should your office undertake this review.

Sincerely,

[Signature]

Jeff Ruch
Pacific Director

Attachments