Clean up at Hunters Point Naval Shipyard

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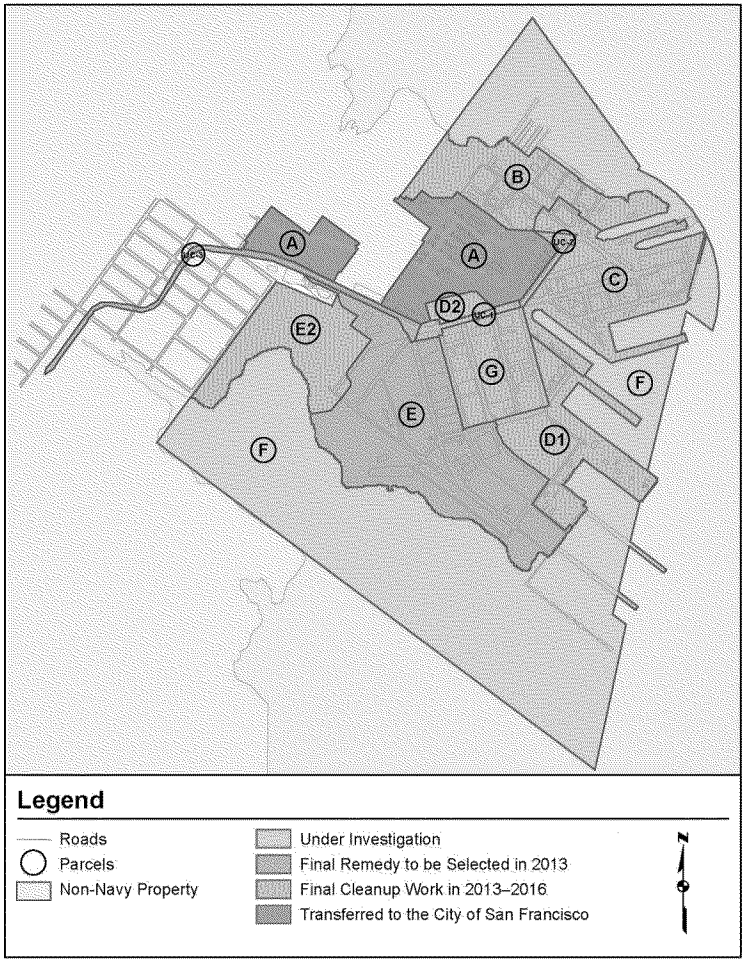


Introduction

1940 - Navy owns shipyard

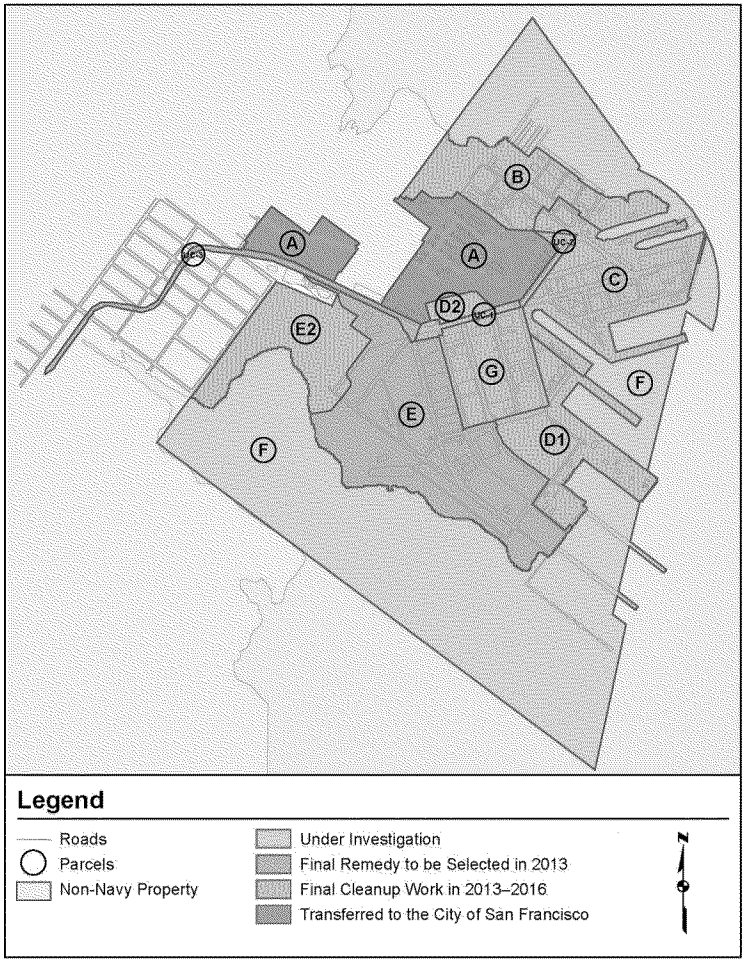
1946 - United States' Naval Radiological Defense Laboratory

1974 - Triple A Machine Shop, Inc.

Triple A Machine Shop was indicted and convicted for illegal disposal of hazardous substances at Hunters Point.

1989 - EPA placed the Shipyard on its National Priority List

27 years ago



Introduction

What is an EPA Superfund site?

Who holds responsibility?

Navy, EPA, DTSC, and San Francisco

Key Findings

Superfund law requires Hunters Point must be cleaned up consistent with EPA Superfund guidance

Cleanup has been using standards that violate this requirement and are substantially less protective

The public is therefore potentially exposed to greater risks than would be the case if the law had been followed

Key Findings

The Navy is using a standard of 25 millirem per year, the equivalent of the public receiving 12 additional chest x-rays each year

EPA either didn’t catch this or allowed it to happen

Key Findings

The Navy is using a 42 year old regulatory guide from the Atomic Energy Commission which **no longer exists**

EPA says the guide is not to be used

EPA either didn't catch this or allowed it to happen

Key Findings

The Navy is shipping out for recycle and disposal, waste with radioactive contamination to sites not licensed or designed to receive it

EPA either didn’t catch this or allowed it to happen

Key Findings

Navy is using RESRAD model even though EPA guidance requires the use of its Calculator

EPA either didn’t catch this or allowed it to happen

Key Findings

Navy says it is using EPA preliminary remediation goals as its cleanup standards, but it is using them from 1991-**a quarter of a century old**- rather than current PRGs

EPA either didn't catch this or allowed it to happen

Results

The Hunters Point cleanup standards are far more lax than EPA's current remediation goals recommend.

Sometimes 100s of times more lax

Tetra Tech: False Samples

April 2014 Tetra Tech was caught Red-Handed

"Deliberately Falsified Radiation Readings" - NRC

Can any Tetra Tech measurements then be trusted?

Tetra Tech continues working.

This means they continue work even after being caught.

How could this be considered safe?

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BLVD., SUITE 100
KING OF PRUSSIA, PA 19406-2713

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EA-15-230

Andrew N. Bolt
President
Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, New Jersey 07950

SUBJECT: NRC OFFICE OF INVESTIGATIONS REPORT NO. 1-2014-018

Dear Mr. Bolt:

This letter refers to an investigation conducted by the U.S. Nuclear Regulatory Commission (NRC) Office of Investigations (OI) between April 29, 2014, and September 17, 2015, to determine, in part, whether employees of Tetra Tech EC, Inc. (Tetra Tech), deliberately falsified soil sample surveys from the area referred to as 'Parcel C' at the U.S. Navy's Hunter's Point Naval Shipyard (HPNS) in San Francisco, California. A Factual Summary of OI Investigation Report No. 1-2014-018 is enclosed (Enclosure 1) with this letter.

The RTS, who was responsible for monitoring the work the technicians performed in the field, testified to OI that, on approximately 10 to 15 occasions, he deviated from where the engineers instructed the technicians to dig without following protocol. However, the RTS stated that this was done to avoid obstructions (e.g., utility lines, buildings) within the specified area. Although the RTS denied obtaining samples from unspecified locations in order to obtain lower contamination levels, he confirmed that he had signed two chain-of-custody forms for samples that the licensee determined had anomalously low levels for the specified location. OI concluded that the evidence supported that the samples were obtained from a location other than the one specified.

Based on the evidence gathered during the OI investigation, it appears that the RCT and RTS had deliberately falsified soil sample surveys of the HPNS Parcel C.

The NRC, which is known to be lax, found Tetra Tech's behavior to warrant investigation and intervention.

CERCLA 120(a)(2)

"No department, agency, or instrumentality of the United States may adopt or utilize any such guidelines, rules, regulations, or criteria which are inconsistent with the guidelines, rules, regulations, and criteria established by the Administrator under this chapter."

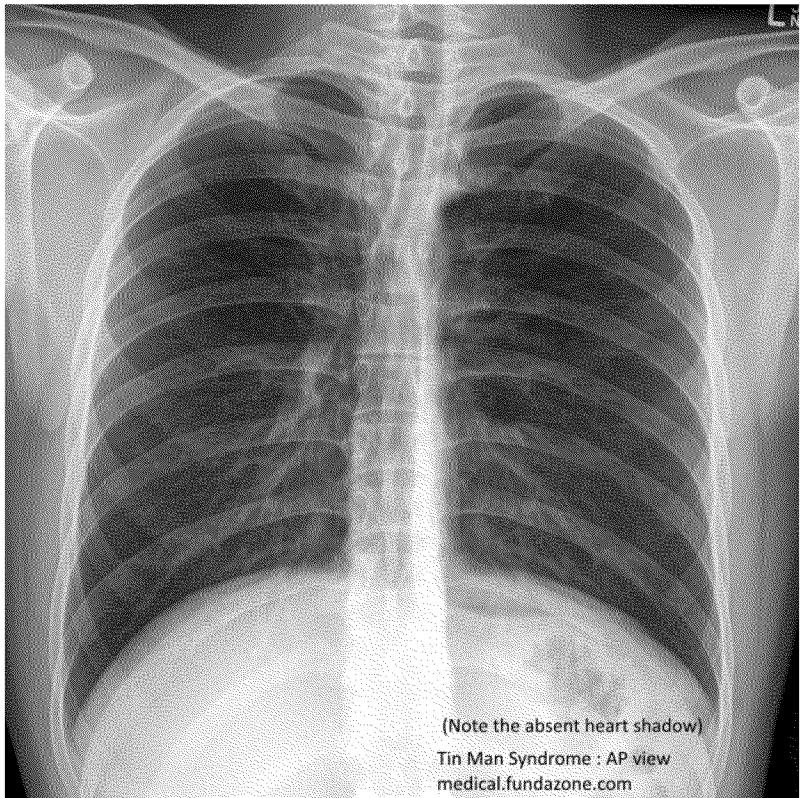
It's time for your Monthly Check Up

25 mrem/yr = 1 chest x-ray/month

Does this feel safe?

Is this necessary?

Can you live like this?



Old Guides

AEC Regulatory Guide 1.86 (**1974**)

How trustworthy is a **42 year old** guide?

This guide is so outdated, that the agency which issued it no longer even **exists**!

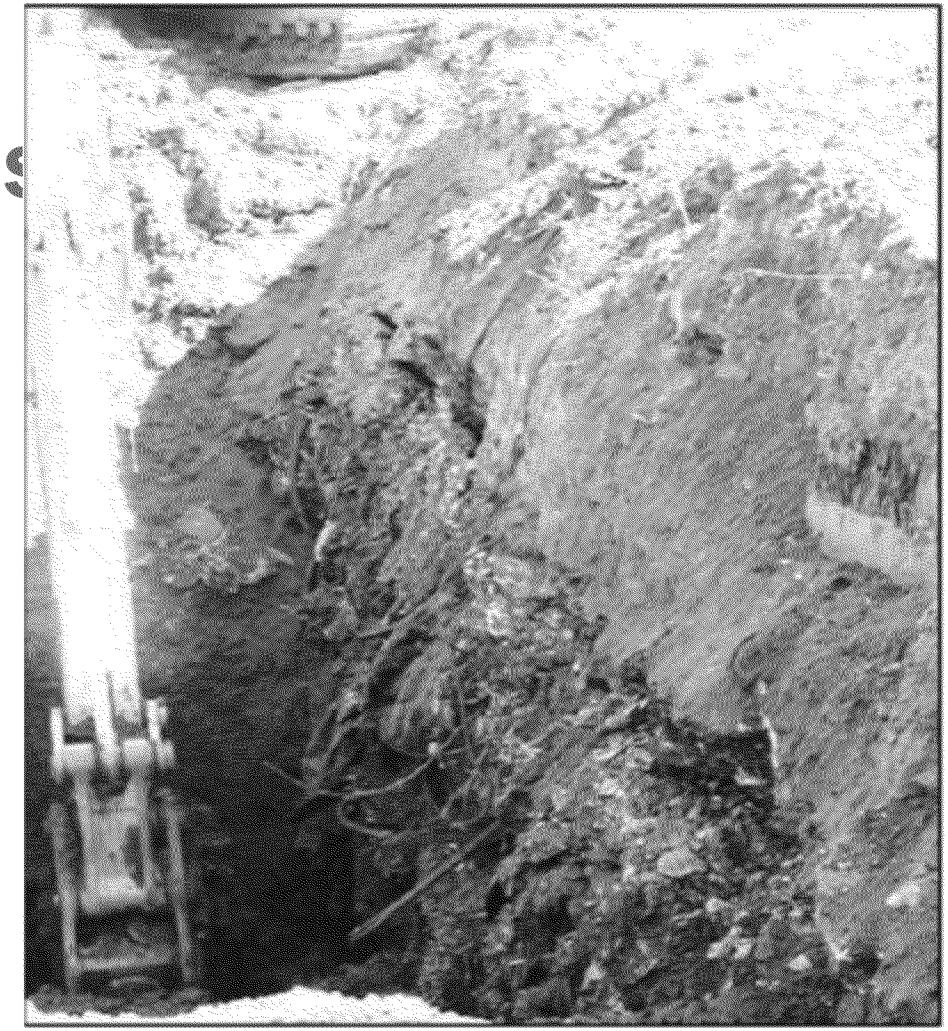
EPA says that the guidance is not to be used, and yet the Navy is using it.

It's Trash Day: But where does

Transportation of waste concerns

Standards for Waste Removal

Problems with Navy Transparency



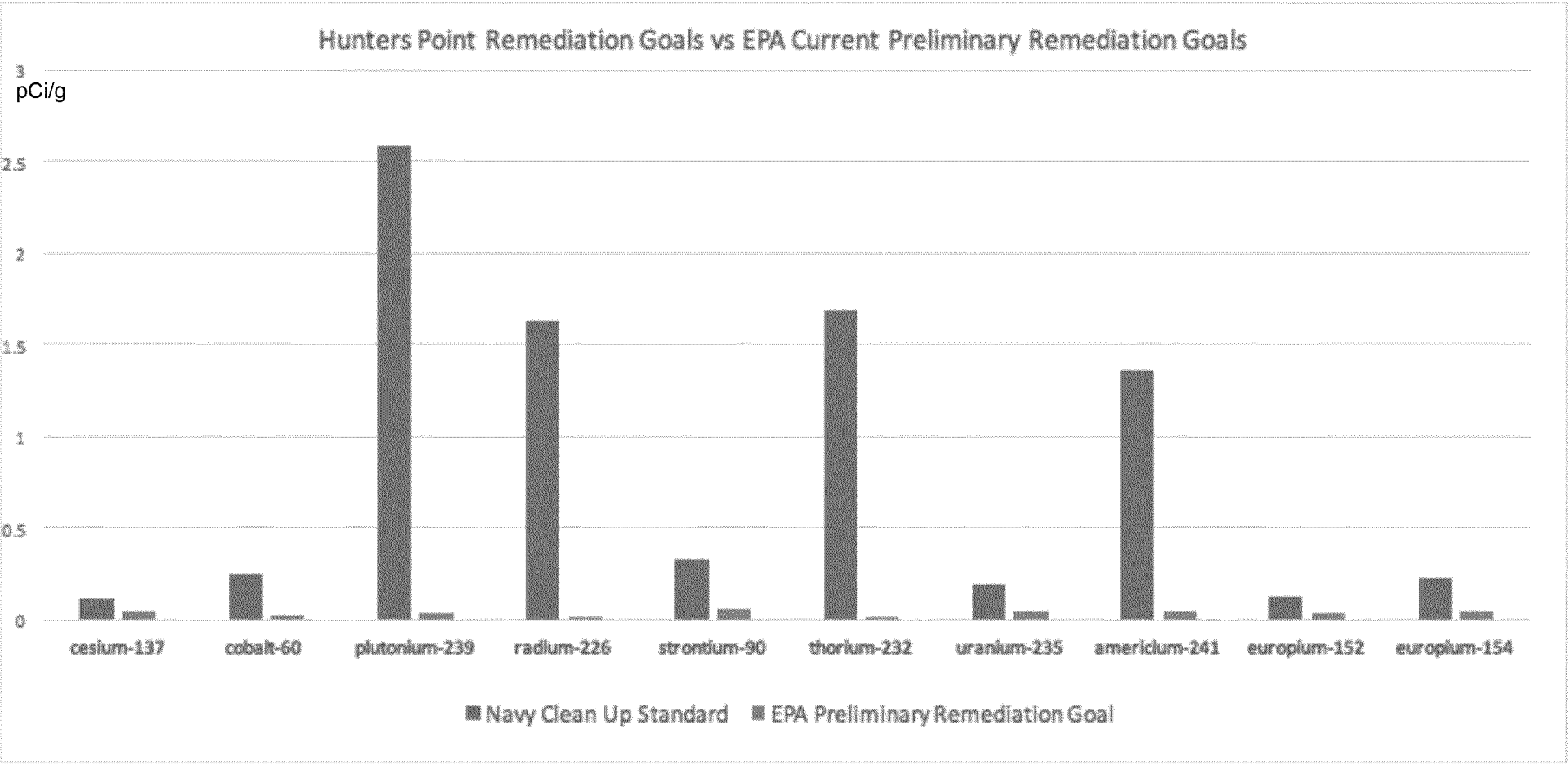
The Mess is Spreading

Level I and Level II Waste Disposal Sites

Comparison of EPA PRGs and Remediation Goals

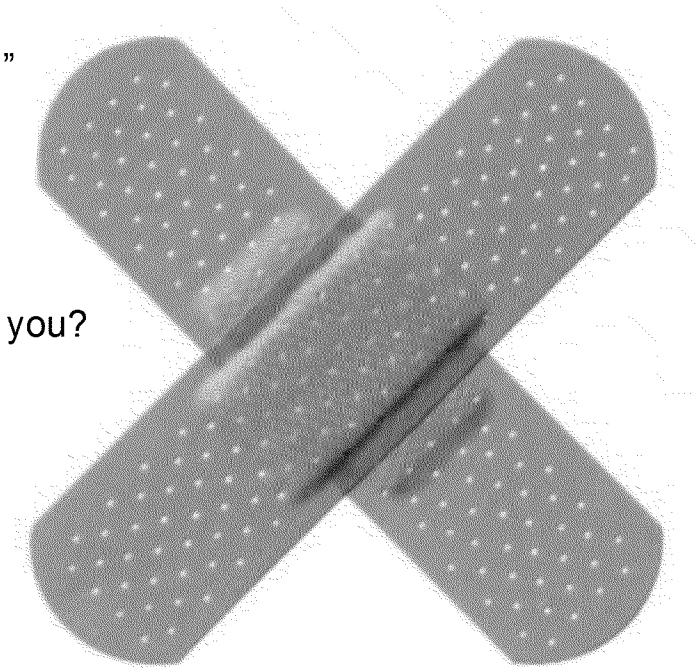
Radionuclide	Hunters Point Remediation Goal	Current EPA Residential PRG	Factor by which HPNS Standards are Relaxed
	(pCi/g)	Preliminary Remediation Goal (PRG)	Goals Compared to EPA PRGs
cesium-137	0.113	0.0466	**2.4**
cobalt-60	0.252	0.0319	**7.9**
plutonium-239	2.59	0.0357	**72.5**
radium-226 *	1.633	0.0063	**259.2**
strontium-90	0.331	0.0639	**5.2**
thorium-232	1.69	0.00347	**487**
uranium-235	0.195	0.0475	**4.1**
americium-241	1.36	0.047	**28.9**
europium-152	0.13	0.0376	**3.5**
europium-154	0.23	0.0452	**5.1**

Clean up: Contamination



EPA/Navy Cleanup Plan for Hunters Point

- “Durable Cover Solution”
- Cover Up vs. Clean Up
- What does this mean to you?
- Long Term Problems



Rather than clean up the contamination, the Navy is relying upon

“Institutional Controls”

Keep off
the Grass

Conclusions

Clean up efforts at Hunters Point Naval Shipyard **are not** consistent with EPA guidelines

Old/Out-of-date Standards that don't comply with current EPA Guidance

Safety Concerns

Disposal of Radioactive Materials in Unlicensed Sites

Clean Up vs. Cover Up

Questions

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