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Radioactive object found near homes at Hunters Point shipyard

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Construction continues in May on Parcel A at the Hunters Point shipyard, which was declared safe for housing.

Photo: Lea Suzuki / The Chronicle

A highly radioactive object has been discovered at the former Hunters Point Naval Shipyard next to a housing area that has been declared safe and free of radioactive contamination for more than a decade, The Chronicle has learned.

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The finding is the latest problem at San Francisco's most ambitious redevelopment project in a century — an effort to transform a 500-acre Superfund waste site into a bustling waterfront neighborhood of 12,000 homes.

The object — a radium deck marker about the size of a silver dollar, 1½ inches across — was unearthed Tuesday on a grassy slope beneath a stretch of newly built condos, less than a foot below ground. The state health department revealed the information Thursday in a "Progress Update" letter sent to the shipyard homeowners' association and obtained by The Chronicle.

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The housing area is known as Parcel A. The California Department of Public Health is scanning it for radioactivity after revelations that employees of the Navy's main cleanup contractor, Tetra Tech, faked radiation measurements in other parts of the shipyard. Parcel A residents and city officials demanded a test after whistle-blowers and media reports raised the possibility that some of those problems may have extended to Parcel A, where 300 housing units have been completed and an additional 150 are under construction.

But the discovery of a radium device is startling because the city and multiple government agencies have said for years that any contamination on Parcel A was cleaned up long ago. The Navy transferred the 75-acre parcel to the city in 2004. The land is now owned by home builder and developer Lennar Corp. Public officials have repeatedly assured residents that no harmful radioactivity exists near their homes and they have nothing to worry about.

Even after the state agreed to perform the new scan, public officials insisted that the parcel is clean and the scan was a mere formality.

"The contamination has been cleaned up," Amy Brownell, environmental engineer for the San Francisco health department, said in May during a tour of Parcel A. "We can say definitively there are no public safety concerns or health concerns out here."

Last week, however, workers flagged an area at the corner of Donahue Street and Galvez Avenue as having readings significantly above natural background levels, according to sources with knowledge of the find. A Navy contractor was called in to investigate.

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The discovery of the radium device sparked an intense debate over its significance. Several government agencies argued that the object doesn't pose any danger because it was found behind a fence, under 10 inches of soil, and quickly removed. Residents and activists disagreed, saying the device is meaningful because there is a long history of public officials saying it shouldn't even exist.

Dan Hirsch, retired director of nuclear policy at UC Santa Cruz, described the find as an "extraordinary development."

"We've been told all along that there were no radioactive materials at Parcel A," he wrote in an email. "Now all that crumbles."

In a series of statements Thursday, various government agencies downplayed the discovery, saying it's evidence that the re-scanning process is working. They argued that the parcel poses no danger because nothing else has turned up.

The Navy posted a brief statement on its website, calling the deck marker "an anomalous reading." The federal Environmental Protection Agency said that "due to its location and level of radiation, the object was not causing harm to residents or workers."

The state Department of Public Health did not immediately respond to requests for comment. In the letter to homeowners, Mark Starr, the deputy director of environmental health, said that no further contamination was found in the surrounding soil. San Francisco Health Officer Dr. Tomás Aragón said in a statement that the city Department of Public Health has hired an independent expert to analyze the object.

"We are confident that the Parcel A site is safe and that the object that was found poses no risks to the residents or workers there," he said.

Some Parcel A residents, however, do not share that confidence. Theo Ellington, a shipyard resident who is is running for the Board of Supervisors and has sued the developer and Tetra Tech, said he was "stunned" by the news. Ellington walks past the location where the deck marker was found every day.

"It's literally mind-boggling — it is less than 50 yards away from where I live," Ellington said. "It further proves that we need a complete analysis of the soil on Parcel A, and the regulatory agencies have proved that their assumptions were wrong and whatever science they were using to make those assumptions needs to be thrown out of the window."

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Radium deck markers contain glow-in-the-dark paint made of radium 226, a poisonous radioactive substance that causes bone cancer. The Navy once used large quantities of radium paint to illuminate the base at night and to light up the dials of instruments. Because radium 226 is so long-lived, with a half-life of 1,600 years, radium devices from the 1940s will still be radioactive thousands of years from now.

The idea of dangerous radiation seems incompatible with the neighborhood that has sprung up on the shipyard's edge, a grid of freshly painted townhomes, dog runs and stunning views of the downtown skyline. Lennar is advertising luxury units with prices near $1.5 million.

Parcel A has long been considered clean because it was mostly used for housing and administrative offices, on a hill overlooking sketchier areas — places where the Navy sandblasted ships covered in fallout from nuclear bombs and studied the effects of radiation in labs full of irradiated, dying dogs. In 2002, before the city took over Parcel A, an EPA technician drove through some parts of it in a van that contained a radiation scanner. The EPA said it didn't find any trouble spots.

But that scan could have easily missed contamination, according to Bert Bowers, a former radiation safety officer at the shipyard who became a whistle-blower. There was reason to believe contaminants could be there, he said. Radioactive substances, carried in trucks full of soil and rivulets of rain, can move from place to place if they're not carefully controlled. Bowers and another whistle-blower have also said they later found elevated levels of radioactivity on Parcel A that were never addressed, or were dismissed by Tetra Tech.

Tetra Tech has denied these claims and has stood by its work at the shipyard, attributing any problems to a "cabal" of rogue employees.

The survey of Parcel A is reported to be 90 percent complete, and according to emails obtained through a public records request, the process hasn't been entirely smooth. It's a large, technical project with a tight deadline that was put together quickly, and the state health department has struggled to get employees to help with the fieldwork.

Experts and environmental groups have also criticized the scan as being far too cursory, akin to "walking around with a blindfold," UC Santa Cruz's Hirsch has said.

The handheld radiation scanners used for the test can detect only a certain type of radiation — gamma radiation — while ignoring non-gamma sources such as strontium 90 and plutonium 239, two of the most harmful isotopes found at the shipyard. Only certain areas of the parcel are

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being tested, and no soil samples are being taken and analyzed, unlike in more thorough radiation surveys.

The discovery of a buried radioactive object doesn't mean the process is working, critics say. The scan was designed to be minimal and unintrusive, on the assumption that it probably wouldn't find anything anyway. But the radium device proves that contamination exists on the parcel and was overlooked for years. For this reason, they say, a comprehensive search for radioactivity on the parcel needs to begin immediately.

"We don't believe anyone should be living there anymore," said Bradley Angel, the executive director of Greenaction, a local environmental watchdog group. "It's a nightmare scenario, and the ultimate 'We told you so.'"

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