

Radiological Work Performed by Tetra Tech EC on Treasure Island

Introduction

Recent reporting in various media about work performed for the Navy by Tetra Tech EC (TTEC) at Treasure Island has generated community concerns and questions about the environmental site conditions at Treasure Island and reuse. The Navy wants the public to know that the site conditions at Treasure Island present no health risk to those who live on, work on, or visit Treasure Island.

TTEC performed limited radiological work at Treasure Island between 2007-2008 and 2013-2016. The Navy has confidence that there is no risk to public health and safety because of the work performed, the expert review, and the oversight described below.

Buildings 343 and 344

Background/Analysis:

Buildings 343 and 344 were two of the three buildings that made up the Radiation Detection, Indication and Computation (RADIAC) Maintenance Calibration School. Activities associated with the school included training personnel in the use and calibration of radiation detection equipment.

In 1991 when Naval Station Treasure Island was an active installation, a radiological closeout survey of Building 344 was conducted by Naval Technical Training Center. In 1993, a radiological closeout survey of Building 343 was conducted. The Navy Radiological Affairs Support Office (RASO) reviewed the survey data and, in 1994, recommended termination of the Navy Radioactive Material Permit (NRMP). The NRMP was terminated in February 1994.

In 2006, Buildings 343 and 344 were radiologically impacted in the Historical Radiological Assessment (HRA) because of the history of their use, and not because of known contamination. Radiologically impacted sites are defined as areas that historically had a potential for radiological contamination based on the history of the site or known contamination detected during previous radiation surveys. In 2007, TTEC performed Final Radiological Status Surveys

(FSS) of Buildings 343 and 344. Their 2008 FSS Reports indicated that the results for both buildings met the release criteria required in the agency approved work plan and the buildings could be released for unrestricted use. California Department of Toxic Substances Control (DTSC) and California Department of Public Health (CDPH) reviewed the reports and documented that the buildings were acceptable for unrestricted release as documented in the DTSC letter dated January 16, 2009 and the CDPH memorandum dated November 12, 2008.

Conclusion:

Work performed at Buildings 343 and 344 has been determined to be consistent and accurate, and supports the conclusion that there is no radiological health risk to the community because 1) Navy radiological surveys performed in 1991 and 1993 were conducted prior to the TTEC surveys and also supported unrestricted release; and 2) DTSC and CDPH reviewed and approved the 2008 reports and documented that the buildings were acceptable for unrestricted release.

Building 233

Background/Analysis:

Building 233 was also part of the RADIAC Maintenance Calibration School. In 1950, a spill of radium sulfate was reported in one of its laboratories, and the building was subsequently decontaminated to 1950 standards. In 2006, Building 233 was radiologically impacted in the HRA based on the history of the site. TTEC performed a radiological survey and issued a survey report in 2008 that confirmed contamination. In 2011, Building 233 was further investigated, remediated, demolished, and primarily disposed of as radiological waste by a second Navy contractor. In 2013, after demolition, the building footprint was surveyed by the second Navy contractor. CDPH also submitted soil samples to an independent laboratory to confirm Navy results. On November 5, 2015, CDPH issued a Radiological Unrestricted Release Recommendation (RURR) for Building 233 site and DTSC provided concurrence on the Final Status Survey Report conclusions that the Building 233 Site is suitable for radiological unrestricted release.

Conclusion:

Work performed at Building 233 has been determined to be consistent and accurate, and supports the conclusion that there is no radiological health risk to the community because 1) although TTEC performed the initial survey that confirmed contamination, a second Navy contractor performed the follow-on investigation, remediation, demolition, and disposal, and performed the scan of the building footprint after demolition; 2) CDPH analyzed split samples and recommended unrestricted release; and 3) DTSC concurred with the conclusions of the Final Status Survey Report that the Building 233 site is suitable for radiological unrestricted release.

IR Site 6**Background/Analysis:**

Although Site 6 was not identified as historically having a potential for radiological contamination based on the history of the site, it was designated “operationally impacted” because of its use as a laydown area for Low Level Radiological Waste (LLRW) Bins and as an area to screen soil from Site 12 as part of the Navy’s remediation activities. In 2016, TTEC performed the FSS for Site 6 and prepared the FSS Report, with review and oversight by Navy project managers, RASO and CDPH. In February 2019, CDPH performed a confirmation radiological survey of the Site 6 surface that confirmed no presence of elevated readings. CDPH also collected soil samples that are currently being evaluated. Upon confirmation that radiological goals have been achieved, the Navy anticipates CDPH will issue a Radiological Unrestricted Release Recommendation (RURR) for Site 6.

Conclusion:

Work performed at Site 6 has been determined to be consistent and accurate, and supports the conclusion that there is no radiological health risk to the community because 1) the work TTEC performed in 2016 was conducted with close review and oversight by Navy project managers, RASO and CDPH; and 2) CDPH performed an independent confirmation survey and collected soil samples for analyses.

Buildings 1121 and 1323

Background/Analysis:

Buildings 1121 and 1323 were residential buildings that were not radiologically impacted. However, because they were located within Site 12 they were scanned for potential incidental radiation by TTEC in 2013. Radiological scanning indicated the buildings could be demolished and disposed of as non-radiological waste. CDPH reviewed and approved the building scan reports and also performed confirmation surveys in 2013. In 2013, building demolition and disposal was also completed with the exception of the concrete foundations. Foundations were subsequently removed by another contractor. Additional radiological scans in the area of former Buildings 1121 and 1323 are scheduled to be performed in 2019 as part Site 12 characterization by a third Navy contractor. This area is also subject to a Site 12 Radiological Feasibility Study (FS) that is currently being prepared.

Conclusion:

Work performed at Buildings 1121 and 1323 has been determined to be consistent and accurate, and supports the conclusion that there is no radiological health risk to the community because 1) the work TTEC performed in 2013 was conducted with close review and oversight by Navy project managers, RASO and CDPH; 2) CDPH performed an independent confirmation survey; and 3) additional scans and evaluations are planned for Site 12.

IR Site 12

Background/Analysis:

Site 12 includes four Solid Waste Disposal Areas (SWDAs) and the Treasure Island housing area. In 2011, CDPH performed independent surveys of areas just outside of the SWDAs and located two areas where the detected radiological energy was greater than in surrounding areas. In 2013, TTEC, under the oversight of CDPH and the Navy, performed surveys to confirm these areas, removed the potential sources, and where needed, provided appropriate waste disposal. TTEC collected samples in parallel with CDPH at several locations or provided split samples to CDPH. In addition, in 2013, at the request of Treasure

Island Development Authority, CDPH conducted another radiological survey in a different location within the Site 12 open space housing area and identified five locations that required additional investigation. As was done for the 2011 discoveries, TTEC, under the oversight of Navy and CDPH, performed radiological surveys to confirm these areas, conducted removals and disposal where needed, and coordinated with CDPH in the collection of split samples.

Conclusion:

Work performed at Site 12 has been determined to be consistent and accurate, and supports the conclusion that there is no radiological health risk to the community because 1) the work TTEC performed at Site 12 was conducted with close review and oversight by CDPH and the Navy; 2) CDPH performed independent confirmation surveys and collected soil samples; 3) environmental cleanup and assessment of Site 12 continues by other Navy contractors under the oversight of the Navy and Regulatory Agencies; and 4) all Site 12 open spaces and residences have been surveyed by CDPH and others, confirming that there is no radiological risk to those who live on, work on, or visit Treasure Island.

Radiological Monitoring and Compliance Support

Background/Analysis:

From 2012 to 2013 TTEC performed radiological compliance activities at the UST 240 area within Site 6, Site 12, Site 31, and Site 33. In general, TTEC's radiological compliance support included performing routine compliance surveys of sites (including stockpiles), maintaining radiological postings and controls for radiologically impacted areas not under the control of another contractor, routinely providing site specific radiological health and safety training for visitors or contractors working in radiologically impacted areas, and providing radiological screening for contractors performing non-radiological work in a radiologically impacted site. TTEC also analyzed up to 50 soil samples for gamma spectrometry collected during the non-radiological Feasibility Study data gap sampling at Site 12; and, provided radiological support during groundwater monitoring and well head repair at Site 12. None of the radiological compliance work performed by TTEC supported any recommendations for unrestricted release. All areas under radiological control were managed by other contractors before and after TTEC performed their work. No contamination was found before or after TTEC conducted their work.

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Conclusion:

Work performed for radiological monitoring and compliance support has been determined to be consistent and accurate, and supports the conclusion that there is no radiological health risk to the community because (1) none of the radiological compliance work supported any recommendations for unrestricted release; (2) all areas under radiological control were managed by other contractors before and after TTEC performed their work; and (3) the work was substantially limited in time and scope.