



FACT SHEET

Time-Critical Removal Action

Installation Restoration Program Site 1

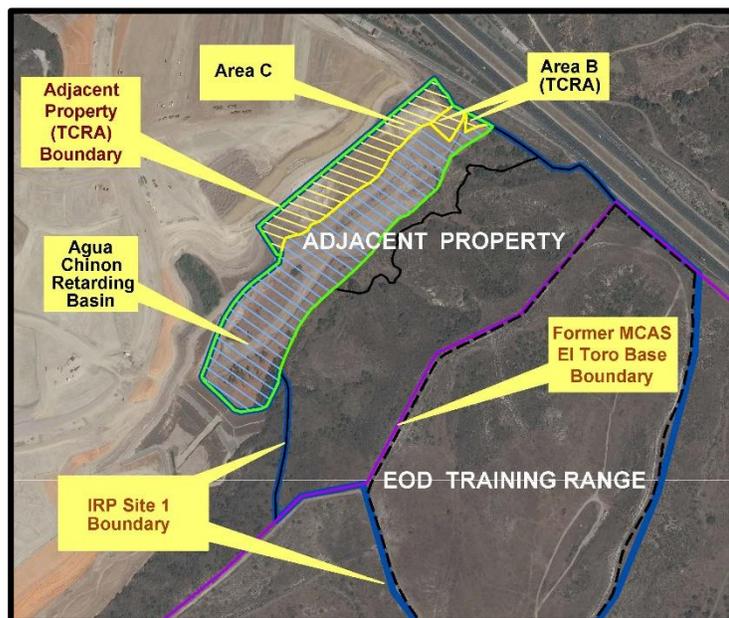
Former Marine Corps Air Station El Toro

Irvine, California



March 2019

The purpose of this fact sheet is to update the community on the United States (U.S.) Department of the Navy's (Navy's) continuing cleanup activities at Installation Restoration Program (IRP) Site 1 associated with the Former Marine Corps Air Station El Toro (Station) in Irvine, California. In 2018, the Navy implemented a time-critical removal action (TCRA) at the IRP Site 1 Adjacent Property to address the potential presence of munitions in the soil. The Adjacent Property is an off-Station area consisting of private and public property never owned by the Navy, which is approximately 56 acres in size.



Previous investigations and cleanups at IRP Site 1 have included a munitions range evaluation and hazard analysis in 2002, a munitions characterization in 2008, and a TCRA for the Adjacent Property in 2010. During the 2010 TCRA, nearly all munitions and debris items identified and recovered were from depths of less than 12 inches below ground surface. A more complete history of previous site investigations at IRP Site 1 was provided in two previous fact sheets: December 2017 and July 2018 (document location information is provided on page 2).

The 2018 TCRA addressed a 20-acre portion of the IRP Site 1 Adjacent Property. (The remaining acreage will be addressed in a subsequent remedial action.) This area is referred to as the "Adjacent Property (TCRA)." This acreage includes Area B (TCRA) (0.5 acre), Area C (5.1 acres), and the Agua Chinon Retarding Basin (ACRB, 14.4 acres). This fact sheet discusses the TCRA process and results from the 2018 TCRA.

TCRA FACTS

- No munitions/munitions-related items were discovered
- TCRA was completed within 30 days
- 12,238 cubic yards of soil were mechanically screened
- 13.8 acres were geophysically analyzed
- 351 digital geophysical mapping (DGM) targets were identified and resolved

PRE-MOBILIZATION ACTIVITIES

A number of activities were performed prior to field implementation of the TCRA. On 9 July 2018, a kickoff meeting was held for all stakeholders, including the Navy, Department of Toxic Substances Control (DTSC), Regional Water Quality Control Board (RWQCB), U.S. Environmental Protection Agency (USEPA), U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and the two landowners (The Irvine Company and County of Orange). This helped support effective communication and coordination among the various entities associated with the project. (Not all chose to attend.)

CULTURAL RESOURCES: The Navy coordinated with the California State Historic Preservation Office regarding potential cultural resources on site. In addition, cultural resource monitoring was conducted through the course of the intrusive fieldwork. No cultural resources of any type were observed. The TCRA had no effect on historic properties (i.e., resources eligible for or listed in the National Register of Historic Places).

BIOLOGICAL RESOURCES: The project biologist completed a pre-construction survey on 10 and 11 February 2018. Prior to implementation of the TCRA technical approach, the project biologist also conducted 18 biological site visits, from 14 June to 15 August 2018, to characterize the presence and activities of protected species (i.e., coastal California gnatcatcher and least Bell's vireo) within the project footprint. Biological monitoring was conducted during all fieldwork activities, and no nesting behavior was observed. There was no disruption (i.e., "take" as defined under the Endangered Species Act) of any protected species.

CONTACTS

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Soil Screening Plant Operations



Digital Geophysical Mapping



Subsurface Clearance Activities

MUNITIONS CONSTITUENT (MC) SAMPLING: MC sampling for explosives residues and select metals (antimony, cadmium, copper, lead, manganese, and zinc) in the soil was conducted in Area B (TCRA) and Area C from 24 to 26 July 2018, as established in the Sampling and Analysis Plan. DTSC did not require sampling within the ACRB due to the extensive soil removal during its construction. Neither antimony nor explosives residues were discovered. Other MC metals (cadmium, copper, lead, manganese, and zinc) were detected in all surface soil samples, including background soil samples. Only two metals (lead and manganese) were found at concentrations slightly greater than background concentrations; however, all concentrations of MC metals were well below their respective project screening levels for residential soil. MC sampling determined that Navy activities had no chemical impact on the Adjacent Property (TCRA) soils.

TCRA RESULTS

Within Area B (TCRA) and Area C, an approximately 12-inch layer of topsoil was removed from all areas and mechanically screened for munitions. Screened soil was then scanned with analog equipment (i.e., handheld metal detectors). DGM was used to survey the new soil surface in these areas to identify items for the intrusive investigation. DTSC did not require soil excavation and screening prior to the DGM survey in the ACRB.

AREA	SOIL EXCAVATED AND SCREENED (CUBIC YARDS)	ACREAGE			
		TOTAL	DGM	HANDHELD METAL DETECTORS	NO SURVEY (DUE TO OBSTRUCTIONS)
B (TCRA)	850	0.5	0.49	0.01	0
C	11,388	5.1	3.6	0.8	0.7
ACRB	0	14.4	8.5	0.4	5.5

Most vegetation in the ACRB was removed to a height of approximately 6 inches, leaving the root ball intact to support restoration. Acreage that could not be accessed with the DGM equipment was surveyed using handheld metal detectors. This technical approach was followed except in areas that had existing infrastructure (e.g., roads and rip rap), excessive slopes (a safety hazard), or had sensitive vegetation that otherwise inhibited access. Over 350 survey targets were investigated during the surveys. No munitions or munitions-related items were recovered in the mechanically screened soil or detected during subsequent DGM and analog clearance operations.

SUMMARY

The primary TCRA fieldwork was conducted from 20 August to 18 September 2018. Independent third-party quality assurance activities confirmed that the TCRA was executed in accordance with the Draft Final Work Plan and the Explosives Safety Submission. The Marine Corps System Command (MARCORSYSCOM) is the organization that provides safety oversight on Marine Corps munitions response projects. After a thorough field audit, MARCORSYSCOM had no findings and confirmed that the munitions recovery techniques used during this TCRA were appropriate and consistent with the current state of practice. The DTSC Remedial Project Manager (RPM) and the DTSC Statewide Munitions Response Coordinator also performed a site visit during field operations and had no findings. The complete findings from the TCRA will be presented in the Final Removal Action Report that will be available at the resources provided at the bottom of this page.

CONCLUSIONS

Based on the TCRA results, the 2018 TCRA is expected to be the final investigative/removal action for the Adjacent Property (TCRA). The area has achieved a standard consistent with unrestricted use. Institutional controls in the form of a one-time notification to current property owners will be implemented.

Additional information and documents can be found at these locations:

Administrative Record (complete Site 1 record; all documents)
 Naval Facilities Engineering Command Southwest
 1220 Pacific Highway, Code EV33, Naval Base San Diego BLDG. 3519
 San Diego, CA 92132
 Contact: Ms. Diane Silva, Administrative Records Coordinator
 Phone: (619) 556-1280

Information Repository (selected documents)
 Heritage Park Regional Library
 14361 Yale Avenue, Irvine, CA 92604
 Hours: Mon – Thurs: 10am – 8pm;
 Fri – Sun: 9am – 5pm
 Phone: (949) 936-4040

Or on the Web at: https://www.bracpmo.navy.mil/brac_bases/california/former_mcas_el_toro.html