

Former Trabuco Bombing Range
DERP—FUDS No. J09CA0209
Remedial Investigation (RI)/Feasibility Study (FS)





Meeting 1

Technical Planning Process
(TPP)

June 27, 2005

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Purpose and Objectives

Provide:


- Introduction to US Army Corps of Engineers Formerly Used Defense Site Military Munitions Response Program
- History of the Former Trabuco Bombing Range

Understanding of:


- The project planning efforts associated with the Former Trabuco Bombing Range Remedial Investigation / Feasibility Study
- The Implementation of the US Army Corps of Engineers Technical Planning Process
- The Projects Schedule
- Roles and Responsibility




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Agenda



- Introductions
- Opening Remarks
- Purpose and Objectives
- Schedule of TPP and RI/FS
- Formerly Used Defense Sites
 - Program Implementation
 - Los Angeles District FUDS
- Trabuco Bombing Range
 - History
- Remedial Investigation
- Technical Project Planning
- Agency and Stakeholder Comments



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Los Angeles District U.S. Army Corps of Engineers




Mission: Serve the Public and meet Govt. customer needs

- 226,000 square miles
- 420 miles of shoreline
- 10% of the US population, growing
- Regulatory/Construction/Flood Control
- /Navigation/Recreation/Environmental





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Trabuco Bombing Range TPP and RI/FS Schedule

TPP Meeting 1: June 27, 2005

TPP Meeting 2: August 18, 2005

-Comments on Conceptual Site Model

TPP Meeting 3: October 12, 2005 – Public Notice & News Release

-Brief RI/FS Work Plan, 60 day review starts

-Over view of Public Involvement Plan

Public Meeting: October 12, 2005 – Poster session

TPP Meeting 4: December 15, 2005

-Response to Comments on Draft RI/FS Work Plan

Technical Project Planning Document: January 15, 2006

Final RI/FS Work submitted – 30 day cross check, 60 day Field Count Down



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Formerly Used Defense Site (FUDS) Primer

Why	Congress 1986 'correction, detection and disposal of unexploded ordnance which creates an imminent and substantial endangerment....'
Where	'the Secretary shall carry out all response actions under CERCLA at properties owned by, leased or otherwise possessed by the United States' – USACE assigned
Who	USACE has almost 10,000 FUDS identified nationwide, over 1,300 in the Los Angeles District, funding limited
How	Military Munitions Response Program (MMRP) and Hazardous Toxic Radioactive Waste (HTRW) use the DoD investigation/cleanup methods based on Env. Protection Agency (EPA) CERCLA process



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National Status of FUDS Properties and Projects

Metric	October 04	October 01
Total Properties in Inventory	9,730	9,182
Total Properties Eligible for FUDS Program	6,789	6,745
Properties Requiring Response Actions (29%)	2,948	2,827
Total Projects In Inventory	4,871	4,657
Projects Completed	2,678	2,498
Cost to Complete	\$18.1 Billion	

PROPERTY is the entire property formerly owned/used by DoD and is generally analogous to "site"

PROJECT is the individual area of potential hazard, differentiated by type of hazard (HTRW, MEC, BD/DR) and is generally analogous to "operable unit"

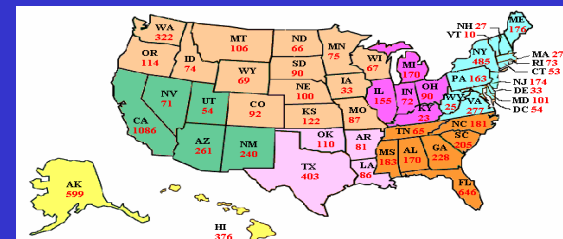


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FUDS Properties by State

data from 2000



Military Divisions
 Great Lakes and Ohio River
 North Atlantic
 Northwestern
 Pacific Ocean
 South Atlantic
 South Pacific
 Southwestern

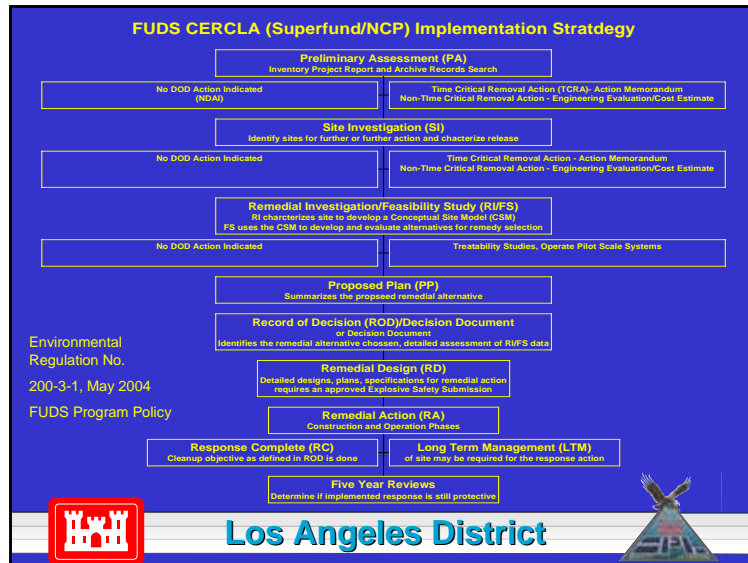
Northern Mariana Islands (CN) CN 32
 Palau (PT) PT 13
 Puerto Rico (PR) PR 78
 U.S. Virgin Islands (VI) VI 110
 American Samoa (AS) AS 29
 Guam (GM) GM 47

Total Number of Properties: 9171
 NOTE: Approximate numbers based on 11/07/00 database download. Subject to change.



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Los Angeles District by the Numbers Formerly Used Defense Sites

Total Sites 1,083

By State:

AZ	297
CA	763
NV	23

Total Number of Projects 511

Project by Type:

Chemical Warfare Material	4
Building Demo/Debris Remov.	17
Partially Responsible Party/HTRW	24
Haz. Toxic Radioactive Waste	28
Containerized/HTRW	85
MMRP	357

MMRP by Risk Assessment Code (RAC):

RAC 1:	18
RAC 2:	33
RAC 3:	54
RAC 4:	102
RAC 5:	150

Risk Assessment Code (RAC)

RAC 1 - 4

Action is required to mitigate the Munitions and Explosives of Concern (MEC) hazard or protect personnel (i.e. fencing, physical barrier, guards, etc). Rankings 1-4 with 1 as highest priority, indicate the relative priority for cleanup among thousands of sites. It evaluates and scores the severity of a munitions (from catastrophic to negligible) and the probability (from frequent to improbable) of an MEC encounter.

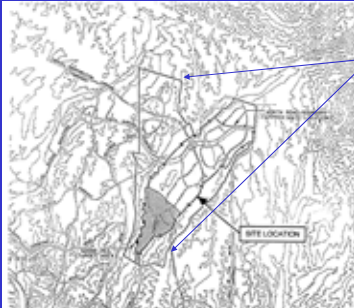
RAC 5

Usually indicates no DOD action required.

U.S. Army Corps of Engineers, Los Angeles District

Trabuco Bombing Range History

- 1944-1949 1,800 acres for use by pilots in dropping practice bombs and firing practice rockets
- 1950-1956 boundary is reduced to 502 acres in south end
- After 1956 land is returned to previous use as grazing and farming



Rancho Santa Margarita Boundary

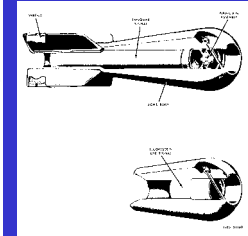
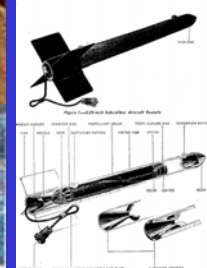


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Trabuco Bombing Range History

- Practice Bombs types were 3 & 25 pound bombs called "target markers" and 2.25 & 5 inch inert practice rockets
 - Practice bombs contained an expelling charge of smokeless powder and a marker load of stabilized red phosphorous or zinc oxide



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Trabuco Bombing Range Historical Photos



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Trabuco Bombing Range Historical Photos



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Trabuco Bombing Range Historical Photos



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Trabuco Bombing Range Historical Photos



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Trabuco Bombing Range Historical Significance

United States Marine Corps circa Fall 1944 - Peleliu



An F-4U lands on Peleliu airfield two weeks after the invasion in September 1944.



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Trabuco Bombing Range Historical Significance

US Marine Corps Spring 1945, Okinawa

F4U Corsairs fly countless close support missions



Trabuco Bombing Range Historical Significance



US Marines in the early 1950s

F4U Corsairs fly 44% of all fighter-bomber missions over Korea



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Trabuco Bombing Range History - Development



Rancho Santa Margarita
O' Neill Regional Park
Orange County, CA

2003 Money Magazine
Best Small City in the West
"Rancho Santa Margarita"



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Trabuco Bombing Range History - Development

- 1984 Santa Margarita Company requests El Toro MCAS assistance in clearing the site prior to development
 - El Toro MCAS/OCHDS conduct surface sweep of southern end of site — area and removes 14 truck loads (50,000 lbs) of 'empty' practice munitions, 478 items suspected of containing spotting charges—those were destroyed
 - El Toro MCAS continues clearance support until 1988
- 1988 Santa Margarita Company has stockpiled 122,000 lbs of ordnance on site MCAS unable to respond
 - In S. end of site 2'-3' soil was turned over, run through 4" screen and MEC removed and the area walked with metal detectors
 - Several tons of ordnance buried 20-30 feet below ground surface under 8th hole of golf course



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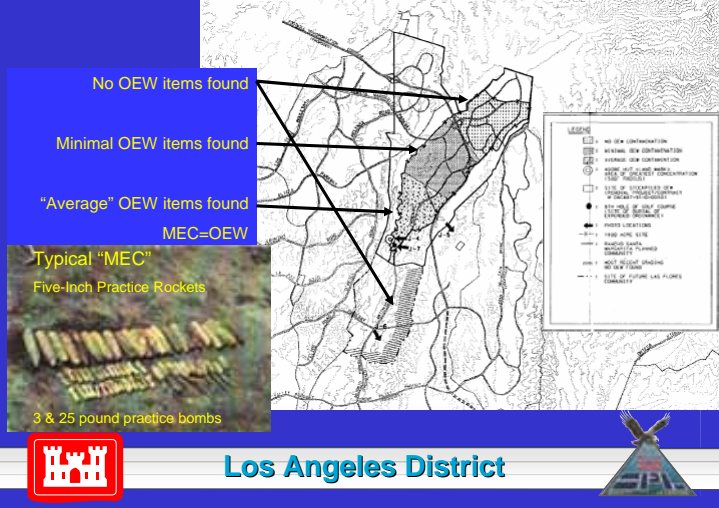
Trabuco Bombing Range History - Development



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Trabuco Bombing Range History - Development



Trabuco Bombing Range History - Development



Trabuco Bombing Range FUDS History

- 1990 USACE Inventory Project Report (INPR)
 - Establishes the property as FUDS, Site assessed and assigned a Risk Assessment Category of "2", "critical, high priority"
- 1991 USACE removes 122,000 lbs of Ordnance
- 1993 the Archives Search Report (ASR) completed
 - Rancho Santa Margarita population 17,000
 - ASR consisted of records search and site inspection
 - ASR noted that areas outside of the site boundary near adobe hut may be impacted; recommended EE/CA phase – which is now equivalent to the R/VFS



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Trabuco Bombing Range FUDS History

- 1998 USACE Technical Assistance Group completes quality assurance evaluation of work completed to date
 - Various locations inspected and no surface OE found
- 1999 USACE completes Supplemental INPR and incorporates ASR/TAG findings:
 - Additional acres potentially impacted near Adobe Hut
- 2003 USACE programmed an FY04 Supplemental INPR due to heightened concerns about the possible encounter of people with residual MEC – overtaken by events.....
 - Rancho Santa Margarita population 47,000
- 2003 September Orange County bike path construction crew encounters buried MEC



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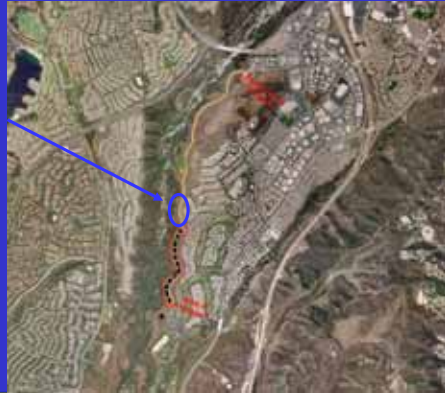
Trabuco Bombing Range FUDS History

Time Critical Removal Action 2004

Orange County bikeway construction uncovered up to 11 MEC in late September 2003; 3 to 4 still contained the spotting charge

Trigger event was signed Action Memorandum 1/9/04

What is a TCRA? A CERCLA (Superfund) Term 40 CFR 300.415(b)(3) and (4). If the lead agency determines that a removal action is appropriate to respond to an imminent danger posed by the release or threat of a release, where cleanup or stabilization actions must be initiated within six months to reduce the risk.



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Trabuco Bombing Range FUDS History

Time Critical Removal Action 2004

- Action Memorandum Signed January 9, 2004
- Draft Work Plan Issued February 18, 2004 and Final April 30, 2005
- Field work initiated May 10, 2004 and was completed May 26, 2004
 - In that time 265 subsurface anomalies were identified and excavated
 - TCRA was 3,300 feet long by avg. of 22 feet wide, ~2 acres.
 - Found:
 - Nine 3-lb practice bombs, all inert
 - One 25-lb practice bombs, inert
 - One 2.25-inch subcaliber aircraft-training rocket, these were inert from the start
 - One 5-inch aircraft training rocket head only - no rocket body found, these were inert from the start
- No 'live' MEC found during the TCRA
- Completion Report Draft November 29, 2004 and Final February 10, 2005



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Above: 5-inch Practice Rocket Head

Top Right: 3lb Practice Bomb

Middle Right: 2.25-inch Practice Rocket

Bottom Right: 25lb Practice Bomb

Actual TCRA MEC Encountered

Legend

- Data Area Boundaries
- No Contact/Cultural Item
- MEC Encounter
- Non-OE Item
- No Find

Thank you!

- Questions and/or comments?