



DEPARTMENT OF THE NAVY ANNOUNCES Proposed Plan for No Further Action at Site 62 Marine Corps Installations West-Marine Corps Base Camp Pendleton

May 2014

The Department of the Navy (including both the Navy and the Marine Corps) invites you to comment on the Proposed Plan for Site 62 at Marine Corps Installations West-Marine Corps Base Camp Pendleton (Camp Pendleton). The Navy proposes no further action for Site 62 because the contaminated soil has been removed from the site.

Camp Pendleton is located in northern San Diego County, California, bordered on the west by the Pacific Ocean. It occupies approximately 125,000 acres of land ([Figure 1](#)). Nearly 60,000 personnel train at Camp Pendleton every year, with more than 42,000 service members assigned to the base.

Site 62 is in the northwestern part of Camp Pendleton ([Figure 1](#)) and is part of the Navy's ***Installation Restoration (IR) Program**** (words bolded and in italics are defined in the Glossary on page 8). The purpose of the IR Program is to locate and clean up hazardous substances from former activities at military installations.

The Navy is the lead agency and is responsible for investigating and cleaning up contamination that resulted from historic operations at Site 62. The U.S. Environmental Protection Agency (EPA) and the State of California, represented by the Department of Toxic Substances Control (DTSC) and the San Diego Regional Water Quality Control Board (Water Board), provide support to the Navy by reviewing and commenting on all of the Navy's investigations and activities.

This Proposed Plan summarizes the Navy's investigations and activities at Site 62 and presents the basis for the Navy's determination that no further action is necessary to protect human health and the environment. More detailed information on the results of the Navy's investigations and activities at Site 62 are contained in the ***Administrative Record*** for Camp Pendleton.

30-Day Public Comment Period
May 1 to May 30, 2014

You are invited to review the no further action proposal described in this proposed plan and send written comments during the comment period. See page 7 for information on where to find the documents and page 8 for how to submit comments.

Public Meeting
May 14, 2014
6:00 to 8:00 p.m.
Pacific View Event Center
Camp Pendleton

This meeting is an opportunity for you to hear more about the no further action proposal, to ask questions, and to give verbal and written comments in person.

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The Navy, the EPA, and the State of California encourage the public to review this document to better understand this site and IR Program activities that have been conducted at Camp Pendleton.

INTRODUCTION

Site 62 Location and History

Site 62 is located in the northwestern part of Camp Pendleton (Figure 1). It is approximately 3/10 of an acre in size, consists of undeveloped land and native vegetation. The area surrounding Site 62 is also undeveloped and is currently used for training operations.

San Mateo Creek, approximately 1,000 feet south of Site 62 and the associated uplands, including Site 62, are identified in the Arroyo Southwestern Toad Habitat Recovery Plan as potential habitat for the arroyo southwestern toad, a federal endangered species. A fence currently surrounds the site to prevent the arroyo southwestern toad from entering the site.

An asphalt batch plant operated at Site 62 from the 1940s to the 1960s. The site was mined for gravel and aggregate in the 1980s. A transformer was used to supply power during mining operations. In January 1980, a storm caused the transformer to tip over and spill approximately 200 gallons of transformer fluid. The spill was cleaned up immediately after the release and 15 drums of contaminated soil and 14 drums of liquid waste (including oily material skimmed from water that ponded from precipitation throughout the spill and cleanup period) were removed from the site. In 2000, the Navy implemented habitat restoration for the arroyo southwestern toad, which included removing residual asphalt and imported fill materials and excavating the soil in the vicinity of the asphalt plant. During these activities, strong odors were reported and asphalt removal was suspended pending further investigation.

THE CERCLA CLEANUP PROCESS

The Navy investigated Site 62 according to the requirements of the **Comprehensive Environmental Response, Compensation, and Liability Act** (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), and the **National Oil and Hazardous Substances Pollution Contingency Plan** (NCP). Figure 2 depicts the typical CERCLA process.



Figure 1: Base Location Map and Site 62

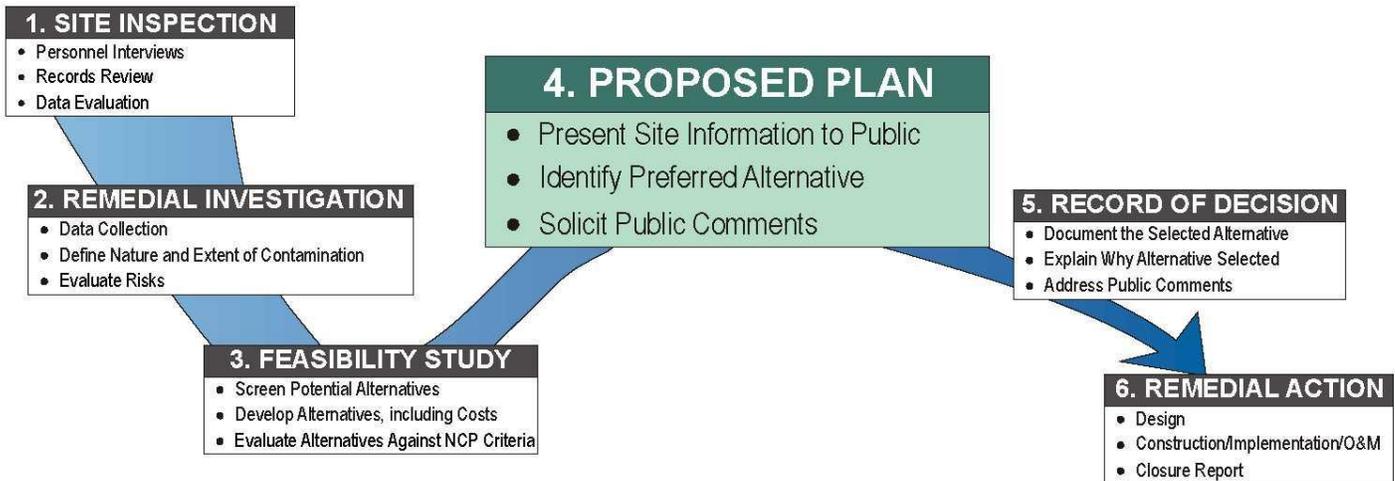


Figure 2: Steps of the CERCLA Process

SITE 62 INVESTIGATIONS

Site Inspections

The CERCLA investigations conducted at Site 62 with the oversight of the EPA and the State, fall under Step 1 of the process. In 2002, the Navy conducted limited site assessment activities, including collecting shallow soil samples in the vicinity of the former asphalt batch plant area to verify asphalt had been removed and to investigate potential areas of impact. Based on the results, two areas of concern (AOCs) within Site 62, AOC-1 and AOC-2, were identified as potential source areas based on different **chemicals of potential concern** (COPCs) in each AOC (Figure 3). The primary COPCs at AOC-1 were polychlorinated biphenyls (PCBs). The primary COPCs at AOC-2 were total petroleum hydrocarbons (TPH).

The Navy’s investigations at AOC-1 and AOC-2 to delineate the lateral and vertical extent of the affected soil were completed using test pits because of excessive cobbles and boulders in the subsurface.

AOC-1

2002

In 2002, the Navy dug eight test pits (TP-1 through TP-5, TP-13 through TP-15) starting from the apparent source area. The test pits were excavated to depths between 10 and 18 feet below ground surface, and approximately 250 cubic yards (yd³) of soil were removed from the site. Thirty soil samples were collected and analyzed. The test pits were backfilled with clean soil. After this investigation, approximately 550 yd³ of soil with PCBs exceeding the 2002 EPA preliminary remediation goal (PRG) of 0.22 milligram per kilogram (mg/kg) for residential exposure to soil were estimated to remain in the subsurface at AOC-1.

2003

In January 2003, an investigation-derived waste excavation was conducted to identify the remaining soil impacted by PCBs at AOC-1. After the excavation, confirmation samples were collected at the excavation floor and sidewalls and analyzed for volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), metals, TPH, and PCBs. VOCs and PAHs were detected infrequently and at low concentrations; so VOCs and PAHs were removed from the analysis list for subsequent investigations. None of the detected metals exceeded residential soil screening criteria except arsenic.



Figure 3: Site 62 Excavations

However, arsenic was detected at concentrations consistent with Camp Pendleton-specific background concentrations.

PCB concentrations above the residential soil screening criterion of 0.22 mg/kg in the upper 2 feet of soil at the northwestern, southeastern, and eastern portions of the excavation, with layers of stained soil visible in the eastern and southeastern sidewalls were left in place and the site was designated as IR Site 62.

2009

In 2009, the Navy conducted a site inspection to delineate the extent of the remaining contamination at AOC-1 and at an area within 100 feet of the spill where precipitation caused the transformer oil to migrate and pond ([Figure 3](#)). Six test pits were excavated to supplement data from the previous test pits. Three of these six test pits (TP-16, TP-17, and TP-18) were excavated parallel to the areas where previous sidewall confirmation samples exceeded the residential soil screening criterion. These three test pits were excavated to approximately 8 feet deep, 10 feet wide, and 15 feet long. The other three test pits (TP-19, TP-20, and TP-21) were excavated in areas where potential ponding of surface water occurred. These test pits were excavated to approximately 6 feet deep, 6 feet wide, and 15 feet long. Composite samples were collected from the sidewalls and floors of the excavations and analyzed for PCBs.

Sample results were compared with the following risk screening thresholds: (1) a human health screening level of 0.22 mg/kg based on EPA's 2009 Aroclor-specific regional screening level (RSL) for residential exposure to soil; and (2) an ecological screening level of 0.371 mg/kg. An ecological screening level was established because ecological receptors were observed at the site during biological monitoring and the site is used as an adult arroyo southwestern toad habitat mitigation area during non-breeding periods. Ecological receptors are considered present at the site and will likely continue to be present at the site in the future.

In addition, samples from TP-17 were analyzed for TPH as diesel and compared with the risk screening threshold of 100 mg/kg for TPH as diesel established in the San Diego County Department of Environmental Health Leaking Underground Fuel Tank Manual.

If initial sample results contained concentrations above risk screening thresholds, then the excavation was extended laterally or vertically. If the sampling results contained concentrations below risk screening thresholds, then no further excavation was required.

No PCB concentrations exceeded the risk screening thresholds, with the exception of a sidewall sample from TP-16. The initial composite sample from the sidewall of TP-16 showed PCB concentrations above the residential risk screening threshold. More excavation was completed at TP-16 and more sidewall samples were collected. PCBs were not detected above the residential risk screening threshold in the subsequent sidewall samples.

No TPH as diesel concentrations exceeded the TPH as diesel risk screening threshold.

2010-2011

In 2010, two soil samples were collected at a depth of 1 foot below ground surface from soil located between the 2003 excavation and TP-5. Both of the samples exceeded the risk screening thresholds: (1) the Aroclor-specific RSL for residential exposure to soil of 0.22 mg/kg; and (2) the ecological screening criterion of 0.371 mg/kg.

In 2011, additional excavation was planned and TP-22 was positioned to delineate and remove these concentrations ([Figure 3](#)). The excavation removed all visibly contaminated soil, approximately 32 yd³, and eight initial confirmation soil samples were collected: six samples from the sidewalls, and two samples from the excavation floor. PCBs were not detected above

the risk screening thresholds in seven of eight confirmation samples. Aroclor 1242 and Aroclor 1260 were detected above the risk screening thresholds in one sample collected from the southern portion of the excavation floor. Additional excavation was performed, an additional 8 yd³ of soil was removed, and another confirmation sample was collected approximately 2.5 feet lower than the initial sample. Concentrations of Aroclor 1242 in this sample still exceeded the human health risk screening threshold.

2013

In October 2013, additional excavation was completed surrounding the concentration of Aroclor 1242 that remained after the 2011 excavation ([Figure 3](#)). Approximately 1 cubic yard of soil from a depth of 6.5 to 8.0 feet below ground surface was removed. Five confirmation samples were collected: one from each sidewall, and one from the bottom. No PCBs were detected in any of the five additional confirmation samples. The excavation was backfilled with clean soil and the surface was graded to conform to pre-existing site conditions.

AOC-2

At AOC-2, the extent of the TPH-contaminated soil was also delineated with excavations. The excavation continued when visibly stained soil was observed. Eventually, the excavation turned into one large excavation. In addition, a buried pipe, a remnant of former equipment, was removed. Nine confirmation samples were collected from the sidewalls and bottom of the excavation and compared with risk screening thresholds of 100 mg/kg for TPH as gasoline and TPH as diesel and 1,000 mg/kg for total recoverable petroleum hydrocarbons established in the San Diego County Department of Environmental Health Leaking Underground Fuel Tank Manual. Sample results indicated that the TPH-contaminated soil and the source of the contamination had been removed. No further action was recommended at AOC-2.

Groundwater

Groundwater downgradient from Site 62 was investigated as part of the groundwater study conducted between 1992 and 1997. Samples were collected from four wells and did not contain detectable concentrations of PCBs.

In addition, it is unlikely that TPH contamination from Site 62 impacted the groundwater because there is approximately 8 to 10 feet of vertical separation between the petroleum-impacted soil, which has since been removed from the site, and the groundwater table.

NO FURTHER ACTION

Contamination above human health and ecological screening criteria was removed during the site investigations. Concentrations of PCBs in soil at AOC-1 are below the human health risk screening threshold (0.22 mg/kg) and below the ecological risk screening threshold (0.371 mg/kg). At AOC-2, TPH-contaminated soil and the source of TPH contamination have been removed. No other chemicals were detected at concentrations presenting a potential risk to human health or the environment. Arsenic, detected at concentrations above EPA RSL for residential exposure to soil, is within background levels for Camp Pendleton. As a result, further remedial investigation (step 2 of the CERCLA process) and development of remedial alternatives (step 3 of the CERCLA process) are not necessary.

The Navy, in consultation with the EPA and the State of California, has determined that no further action is necessary to protect human health or the environment. The Navy will document this no further action decision in a **Record of Decision** (ROD).

The Navy is releasing this Proposed Plan (step 4 of the CERCLA process) to inform the public

of its no further action proposal and to solicit input from the public to be considered prior to issuing the ROD. The public can provide input by submitting comments to the Navy during a 30-day public comment period or by submitting written or oral comments to the Navy at a public meeting for Site 62. See page 8 for information on how to submit comments.

COMMUNITY PARTICIPATION

This Proposed Plan fulfills the public participation requirements of CERCLA § 117(a) and the requirements of the NCP at 40 CFR § 300.430(f)(2)(i) through (iv).

This Proposed Plan presents the Navy's rationale for its no further action proposal. Comments from the public on the Proposed Plan will be addressed in a responsiveness summary included in the ROD.

WHO TO CONTACT FOR MORE INFORMATION

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WHERE YOU CAN FIND THE CLEANUP PLAN AND OTHER DOCUMENTS

Documents relating to the IR Program and the Proposed Plan can be found for public review and comment at the following information repositories:

Administrative Record

Naval Facilities Engineering Command Southwest

1220 Pacific Highway (NBSD Building 3519)
San Diego, CA 92132
Monday through Friday 8 a.m. to 4:30 p.m.
Please call (619) 556-1280 for an appointment

Marine Corps website at the following link:

[Marine Corps Base Camp Pendleton > Staff & Agencies > Installation Restoration Program](#)

Oceanside Public Library

330 N Coast Highway, Oceanside, CA 92054
Monday and Tuesday 9 am to 8 pm and
Wednesday through Saturday 9 am to 5:30 pm
Please call (760) 435-5600 for an appointment

RECORD OF DECISION

After the end of the public comment period, the EPA, the State of California, and the Navy will prepare and sign a ROD. It will describe the approach chosen for the site and include the Navy's responses to comments received during the public comment period. The ROD will be available to the public in the information repositories once it is finalized.

Comments on Proposed Plan Site 62 Marine Corps Base Camp Pendleton

The public comment period for the Proposed Plan for Site 62 at Marine Corps Base Camp Pendleton, California, is from May 1 to May 30, 2014. A public meeting to present the Proposed Plan will be held on May 14, 2014 from 6:00 to 8:00 pm in the Pacific View Event Center, Camp Pendleton. All interested parties are encouraged to attend the meeting to learn more about Site 62. The meeting will provide an opportunity for the public to submit comments on this Proposed Plan to the Navy. You may provide comments verbally at the public meeting, where all comments will be recorded by a court reporter. Or, you may provide written comments and submit them at the public meeting, mail them, or email them. Please mail your comments to the Navy Remedial Project Manager, Ms. Theresa Morley, at the address provided on page 7. Comments are being accepted by email at Theresa.Morley@Navy.mil or Luis.Ledesma@usmc.mil. All written comments must be postmarked and all emailed comments must be received no later than May 30, 2014.

GLOSSARY

Administrative Record File: All documents that were used to make decisions on cleanup actions for Site 62.

Chemical of Potential Concern: A chemical that may present a potential risk to human health. A determination that a chemical does present a potential risk to human health is usually made in a site-specific baseline human health risk assessment.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A federal law establishing a program to identify and clean up hazardous waste sites and to evaluate damages to natural resources. It is commonly known as Superfund.

Installation Restoration (IR) Program: the IR program provides guidance and funding for the investigation and remediation of hazardous waste sites caused by disposal activities at military installations.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP): The government procedures for responding to oil and hazardous substances spills and releases.

Proposed Plan: A document that informs the public about how the lead agency has evaluated the need for cleanup and seeks input from the public.

Record of Decision (ROD): A document that records a decision on the cleanup of a site made by the lead and support agencies, with input from the public through the Proposed Plan. The lead agency and the supporting agencies sign the ROD.