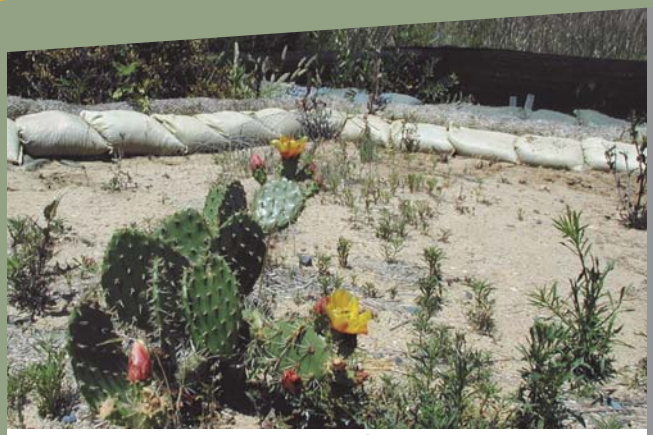
2013

MCB Camp Pendleton

ENVIRONMENTAL CLEANUP PROGRAM
CLEANUP UPDATE

Installation Restoration Program



Revegetation on IR Site 30, successfully cleaned up and closed

in this issue

Camp Pendleton CERCLA Background

MCB Camp Pendleton entered into The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process in 1989. A Federal Facilities Agreement (FFA), which outlines the schedule for completing the investigation and cleanup of sites at the base, was signed for MCB Camp Pendleton in 1990. The FFA establishes the framework and schedule for addressing contaminated sites.

FFA Members

Members of the FFA agreement ensure that the cleanup on MCB Camp Pendleton meets local, state, and federal guidelines:

- United States Environmental Protection Agency (USEPA)
- California Department of Toxic Substances Control (DTSC)
- California Regional Water Quality Control Board (RWQCB)
- Department of the Navy and Marine Corps (DON)

MCB Camp Pendleton: A History in Military Service and Dedication to Preserving California's Resources

Dedicated in September 1942 by President Franklin D. Roosevelt, Marine Corps Base (MCB) Camp Pendleton was established to provide training facilities, logistical support, and administrative support to Fleet Marine Force Units.

Combat Readiness and Fleet Support

MCB Camp Pendleton is the Marine Corps' premier amphibious training base, and the only west coast military installation where comprehensive air, sea, and ground assault training can be conducted. In addition, Marine Corps Air Station Camp Pendleton, property independent of MCB Camp Pendleton, is located within the southern portion of the base and provides much of the air support.

The coastal and mountain terrain support a variety of military training. Fleet Marine Force units use MCB Camp Pendleton's ranges and training areas to maintain combat readiness to meet the mission "...train Marines to win wars."

Environmental Stewardship

The majority of the 125,000-acre base is primarily in northern San Diego County, with approximately 125 acres extending into southern Orange County, including more than 17 miles of undeveloped coastline. It is a biological haven where over 450 species of wildlife thrive, including 12 endangered and 4 threatened species. The primary drinking water resource is the Santa Margarita River, the only free-flowing river in Southern California and estuary for many of the endangered species.

Need more information about the cleanup on MCB Camp Pendleton?

Visit our web pages at:

http://www.pendleton.marines.mil/StaffAgencies/InstallationRestorationProgram.aspx

The Laws and Agencies Involved in Cleanup on MCB Camp Pendleton

CERCLA and NPL
The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 was created by Congress to establish a program to identify, investigate, and clean up hazardous waste sites. The National Priorities List (NPL) was developed under CERCLA to guide the United States Environmental Protection Agency (USEPA) in determining which sites need additional investigation. The Navy's environmental cleanup on MCB Camp Pendleton follows the requirements in CERCLA under the Department of the Navy's Installation Restoration (IR) Program.

USEPA
The United States Environmental Protection Agency (USEPA) is the lead regulatory agency and provides federal oversight for the environmental cleanup at MCB Camp Pendleton.

DTSC
The California Department of Toxic Substances Control (DTSC) is the lead state agency that oversees the cleanup of hazardous wastes and ensures that California laws and regulations are followed.

Water Board
The California Regional Water Quality Control Board (RWQCB), Region 9 is responsible for making sure that the waters of San Diego are clean and that laws and regulations are followed.

Base Cleanup Coordination
The Department of the Navy manages the IR Program at Camp Pendleton in coordination with the Camp Pendleton Environmental Security Department.

MCB Camp Pendleton Site Overview and Cleanup Status

Eighty Installation Restoration (IR) Sites have been investigated on MCB Camp Pendleton. To date, 64 of these IR Sites have been cleaned up and/or closed. There are currently 16 active IR Sites in the base IR Program, all in different phases of the cleanup process.

Active IR Sites on MCB Camp Pendleton

IR Site 7, Box Canyon Landfill

IR Site 7 is an old municipal landfill. The final cleanup solution, described in the Record of Decision (ROD), resulted in placement of an cap over the former landfill; in addition, land use controls were established. The groundwater and landfill gases are monitored regularly, and routine maintenance of the cap is conducted. A landfill gas collection and control system was installed this past year.

22/23 Area Groundwater

The 22 and 23 Areas historically supported industrial activities on MCB Camp Pendleton. The evaluation of cleanup options has resulted in the recommendation to clean up contamination in the most contaminated areas.

Long-term monitoring and land use controls that limit exposure to contaminated groundwater by setting limits on activities, use, or access, will make sure that this solution is effective. A ROD was prepared in 2012.

The final cleanup solution will begin when agreement is received from all FFA members on the ROD.

> A **Record of Decision (ROD)** is a document that explains which cleanup solution has been chosen for a site.

IR Site 1111

Cleanup at IR Site 1111 included removal of more than 2,600 tons of soil and 20,000 gallons of contaminated water.

Groundwater monitoring has been done every three months for the past year, and the site has been replanted with native plants. Based on results from groundwater monitoring samples, No Further Action has been recommended at this site in the ROD, which is currently under review.

IR Site 1115, 13 Area FSSG Lot

There are two plumes of contaminated groundwater under the parking lot at IR Site 1115. A Remedial Investigation / Feasibility Study is planned for mid-2013 to help determine cleanup options and objectives for this site.

IR Site 21, 14 Area Surface Impoundment

IR Site 21 is a former pond that is located near a maintenance facility. A Remedial Investigation has been completed for the site, and pilot studies are underway to evaluate options to clean up contaminants that have affected the groundwater in this area. A Feasibility Study is planned for the end of 2013.

IR Site 33, 52 Area Armory

Cleaning of guns at the armory resulted in contamination of soil and groundwater in this area. Studies of the contamination at the site have been completed, as well as the evaluation of cleanup alternatives. The preferred cleanup solution is underway, and involves removing contaminated soil and groundwater from the site. Once removal is complete, the area will be backfilled with clean material and replanted with native plants and groundwater monitoring will be conducted. Additional investigations are planned for other areas of IR Site 33.

IR Site 62, Asphalt Batch Plant

This area was added to the cleanup program when a transformer tipped over and spilled. Contaminated soil is scheduled to be removed in late 2013.

IR Site 150

This site was recently added to the cleanup program. An investigation was made after information was learned about historic operations and waste disposal practices. Studies have shown that the groundwater in the area is contaminated. A work plan for additional investigation is being finalized and field work will begin in late 2013.


Solar Powered Gas Collection and Control System at Box Canyon

IR Site 1114, 41 Area Arroyo

Soil and groundwater samples were taken at IR Site 1114 to determine what type and how much contamination is at the site. It was determined that cleanup is necessary for groundwater and soil gas. Removal of contaminated materials is planned for 2013.

IR Site 1116, 14 Area Groundwater

This site was added to the IR Program after hazardous wastes were found in the groundwater while evaluating former underground storage tank (UST) sites. Groundwater at the site is currently being tested; results from this testing will determine how to proceed with cleanup.

IR Site 1117, 15/16 Area Groundwater

This site was added to the IR Program after hazardous wastes were found in the groundwater while evaluating former UST sites. Upon regulatory agency review of the Site Inspection Report, this site will move into the Remedial Investigation phase to further determine the extent and type of contamination in the groundwater.

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Activities That Led to Cleanup on MCB Camp Pendleton

How did hazardous wastes get on MCB Camp Pendleton?

Several hazardous wastes, or contaminants, relating to past practices are being investigated and cleaned up under the cleanup program. Base support operations contributed to the contamination of the soils and groundwater. Many of the fluids and solvents used in the past have been phased out due to new regulatory guidelines. Guided by the CERCLA process, cleanup teams are resolving past hazardous waste concerns on MCB Camp Pendleton.

Transportation Maintenance Operations generated waste oils, cleaning solvents, antifreeze, batteries, battery acid, hydraulic fluids

Airfield Operations generated mixed fuels, oils, solvents, hydraulic fluids, paint wastes (e.g. paint, paint strippers, etc.)

Facilities Maintenance Operations generated oils, pesticides, solvents

Miscellaneous Support Operations generated photographic processing chemicals, dry cleaning solvents, hospital wastes

Landfill Operations created ash by the burning of household waste and general military activity

The CERCLA Process

Preliminary Assessment/ Site Inspection provides an investigation of site conditions.

National Priorities List Site Listing occurs when the USEPA determines a site has serious enough contamination to require possible long-term cleanup. MCB Camp Pendleton was added to the National Priorities List in 1989.

Remedial Investigation/ Feasibility Study determines the type and amount of contamination at a site, evaluates treatment alternatives and the potential cost of treatment technologies.

Record of Decision explains which solutions have been chosen to clean up a site.

Remedial Design/ Remedial Action includes designing the cleanup solution for a site. The majority of cleanup occurs during this phase.

National Priorities List Deletion removes a site from the National Priorities List once all work is done and cleanup goals have been achieved.

Community Involvement is an important part of the CERCLA process. Community members are encouraged to read the MCB Camp Pendleton Installation Restoration (IR) Community Involvement Plan, which is available at the Information Repositories as described in *Reports Available for Review* on Page 4.

(Continued from page 3)

IR Site 1118, 21/26/52 Area Groundwater

Three USTs were transferred from the UST program to the IR program because they had low levels of contaminants in the groundwater. Following the Site Investigation, it was determined that additional work needed to be done to determine the level of contamination at this site. A plan for further investigation is being developed.

IR Site 1119, 26 Area Groundwater

Contaminants were recently discovered in groundwater in the 26 Area. As a result, work will be done in that area to determine the extent of contamination, to discover possible sources leading to the contamination, and to provide cleanup alternatives. Field work and a Remedial Investigation / Feasibility Study is planned for 2013.

12 Area Site 13, Former Buildings 1280 & 1283

A former UST was located on this site, resulting in some low levels of contamination in groundwater. Contaminated soil and groundwater were removed from the area in support of a construction project that would run through this site. A year of groundwater monitoring has been completed, and a Feasibility Study is planned for mid-2013.

IR Site 1120, Stuart Mesa Pesticide Maintenance Areas

Since the 1940s, this area was under an agricultural lease. Operations included pesticide storage and mixing areas. The lease has been cancelled, but pesticides remain in the area. Investigations into the type and extent of contamination are underway.

IR Site 1121, Site 1D Groundwater

During cleanup of soil at this former trash burn site, drums that had leaked chemicals into the groundwater were discovered. The contaminated soil has been removed, but the groundwater is still being investigated. Initially, 650,000 gallons of groundwater were removed from the site, but more work needs to be done. Field work is planned for 2013.

IR Site 1122, Shot Fall Zone

This is a new site that came from historic skeet and trap range use and includes lead and polycyclic aromatic hydrocarbons.

contacts

The Department of the Navy and regulatory agencies working to clean up MCB Camp Pendleton are available to answer questions.

Reports Available for Review

Visit our information repository to review program-related documents.

Oceanside Public Library
Civic Center Branch
Periodical Storage, Lower Level
330 N. Coast Highway
Oceanside, CA 92054

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