

MCAS EL TORO
PUBLIC FORUM

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AGENDA

Colonel Fuchs
MCAS El Toro

Welcome
Base Description and History of
Contamination

Andy Bain
United States Environmental
Protection Agency (EPA)

Superfund Program (CERCLA)
Community Relations

Manny Alonzo
California Environmental
Protection Agency, Department
of Toxic Substances Control
(DTSC)

Federal Facilities Agreement
Cal EPA, DTSC
State Involvement in
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Lt. Commander Larry Serafini
MCAS El Toro

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Desalter

Andy Piszkin
Naval Facilities Engineering
Command, Southwest Division

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Colonel Fuchs
MCAS El Toro

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HOW TO PARTICIPATE IN THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY PROCESS

Public participation is an integral part of the Remedial Investigation/Feasibility Study (RI/FS) process. The following is a list of steps you can take to become involved in this decision-making process:

- Ask the Lead Agency (i.e., the Environmental Protection Agency) to add your name to its mailing list for fact sheets, newsletters, and public notices.
- Go to public meetings to talk about your issues and concerns. Ask questions. Speak up!
- Monitor the entire RI/FS process. Get involved at the beginning of the process, by reviewing the documents, attending community meetings, reading the fact sheets and newsletters, and commenting during the public comment periods. Don't wait for the final report.
- Provide input to the Lead Agency (i.e., EPA) *before* the FS is drafted. List specific areas of concern. Identify issues and potential cleanup measures that you believe the FS should address.
- Involve other concerned citizens and organizations. Share information. Study.
- Review the Draft RI/FS carefully. Does it provide decision-makers with an understandable assessment of the problem and the possible cleanup alternatives? Have all potential environmental and public health impacts been accurately assessed and conditioned by mitigation measures? Is the Draft RI/FS adequate?
- Write your comments with specific, factual examples. Seek expert advice, if necessary. Be constructive.
- Go to the public meeting about the Draft RI/FS with enough copies of your prepared statement or comments for each panel member and for media representatives.
- Review the Final RI/FS to determine if adequate mitigation measures are incorporated into the Preferred Remedial Alternative. Have all concerns raised been adequately addressed?

GLOSSARY OF TERMS

Aquifer: A particular zone or layer of rock or soil below the earth's surface through which groundwater moves in sufficient quantity to serve as a source of water.

Contaminant Plume: A three-dimensional zone within the groundwater aquifer containing contaminants that generally move in the direction of, and with, groundwater flow.

Environmental Protection Agency (EPA): The Federal agency responsible for implementing the Superfund program. EPA works in conjunction with state and local agencies, providing technical oversight and funding for many cleanup activities.

Feasibility Study (FS): An analysis of cleanup or remedial alternatives to evaluate their effectiveness and to enable selection of a preferred alternative.

Federal Facility Agreement (FFA): A voluntary agreement entered into by the Navy, the EPA, the California EPA - Department of Toxic Substances Control (DTSC), and the California Regional Water Quality Control Board establishing an overall framework for how the investigation and cleanup of MCAS El Toro will be conducted over the next five years. The agreement discusses how the various government agencies will consider and comment on various studies, as well as the specific rights that the public has throughout the process. The Agreement sets up clean-up schedules and provides for payment of penalties if the Navy fails to meet a required deadline for submission of a major document. Deadlines can be extended only with the concurrence of both the EPA and the DTSC.

Groundwater: Underground water that saturates pores in soils or openings in rock.

Hazardous Substance: Any material that poses a threat to public health and/or the environment. Typical hazardous substances are materials that are toxic, corrosive, ignitable, explosive, or chemically reactive.

Monitoring Well: Wells drilled at specific locations either on or near a hazardous waste site, for the purpose of determining direction of groundwater flow, types and concentrations of contaminants present, or vertical or horizontal extent of contamination.

National Priorities List (NPL): A list of the top-priority hazardous substance sites in the country eligible for investigation and cleanup due to potential or actual risk to public health or the environment.

Operable Unit (OU): A discrete action taken that contributes to the permanent site cleanup. A number of operable units can be conducted during the course of a Superfund project.

Parts Per Million/Parts Per Billion (PPM/PPB): This is a level of concentration for a chemical or element expressed as a percent of weight. For a simple analogy, one ppm can be described as one drop in a bathtub, which holds a million drops of water. Concentration could also be expressed in parts per billion (ppb). One ppb is 1,000 times *smaller* than one ppm. A ppb can be described as one drop in a competition-size swimming pool, which holds one billion drops of water. To convert from ppm to ppb, simply multiply the number by 1,000.

Production Well: A well that pumps water out of the ground to provide a municipal, agricultural, or industrial water supply.

Record of Decision (ROD): A public document that explains what cleanup alternative will be used at a specific NPL site. The ROD is based on information and technical analysis generated during the remedial investigation/feasibility study and consideration of public comments and community concerns.

Remedial Action (RA): The actual construction or implementation phase that follows the remedial design of the selected cleanup alternative at a Superfund site.

Remedial Investigation (RI): One of the two major studies that must be completed before a decision can be made about how to clean up a Superfund site. The RI is designed to determine the nature and extent of contamination at the site.

Resource Conservation and Recovery Act (RCRA): A federal law that establishes a regulatory system to track hazardous substances from the time of generation to disposal. The law requires the use of safe and secure procedures in treating, transporting, storing, and disposing of hazardous substances. RCRA is designed to prevent new, uncontrolled hazardous waste sites.

Superfund: The common name for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. This law authorizes EPA to respond to past hazardous waste problems that may endanger public health and the environment. CERCLA established a trust fund that helps pay for investigation and cleanup of hazardous waste sites. CERCLA was reauthorized and amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA).

Trichloroethylene (TCE): A volatile organic compound that has been widely used as an industrial solvent. TCE is a colorless, odorless, liquid that, when inhaled or ingested in large amounts, can cause irritation of the nose, throat, and eyes, nausea, blurry vision, or dermatitis. EPA has classified TCE as a "probable human carcinogen."

Volatile Organic Compound (VOC): An organic (carbon containing) compound that evaporates readily at room temperature. VOCs are commonly used in dry cleaning, metal plating, and machinery degreasing operations.

**REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS)
SITES**

Operable Unit	Site Number	Site Name
OU-1	18	Regional Volatile Organic Compound (VOC) Investigation
OU-2	2	Magazine Road Landfill
	3	Original Landfill
	5	Perimeter Road Landfill
	10	Petroleum Disposal Area
	17	Communication Station Landfill
OU-3	1	Explosive Ordnance Disposal (EOD) Range
	4	Ferrocene Spill Area
	6	Drop Tank Drainage Area No. 1
	7	Drop Tank Drainage Area No. 2
	8	DPDO Storage Yard
	9	Crash Crew Pit No. 1
	11	Transformer Storage Area
	12	Sludge Drying Beds
	13	Oil Change Area
	14	Battery Acid Disposal Area
	15	Suspended Fuel Tanks
	16	Crash Crew Pit No. 2
	19	ACER Site
	20	Hobby Shop
	21	Material Management Group, Building 320
	22	Tactical Air Fuel Dispensing System
OU-4	Various	Sites identified for future inclusion in the RI/FS

REMEDIAL INVESTIGATION/FEASIBILITY STUDY SITES DESCRIPTION

Operable Unit	Site Number	Site History & Suspected Contaminants of Concern
OU-1	18	Regional VOC Investigation. From 1943 to present, solvents have been used as a routine part of operations and maintenance procedures on base. Groundwater investigations beginning in 1985 have detected VOCs in groundwater, both on and off MCAS El Toro.
OU-2	2	Magazine Road Landfill. Used in the late 1960s to 1980 for disposal of construction debris, municipal wastes, batteries, waste oils, hydraulic fluids, paint residues, transformers, and waste solvents. A wide variety of organic and inorganic contaminants could be present in the landfill.
	3	Original Landfill. Used from 1943 to 1955 as a cut-and-fill facility in conjunction with burning to reduce waste volume. Wastes that could possibly be found in this landfill include metals, incinerator ash, solvents, paint residues, hydraulic fluids, engine coolants, construction debris, oily wastes, municipal solid wastes, and various inert solid wastes.
	5	Perimeter Road Landfill. Used from 1955 until the late 1960s as a cut-and-fill operation, typically burning wastes prior to burial to reduce volume. Wastes disposed of in this landfill include burnable trash, municipal solid waste, unspecified fuels, oils, solvents, cleaning fluids, scrap metals, paint residues, and other materials. Almost any type of waste generated on the base may have been disposed in this landfill.
	10	Petroleum Disposal Area. Used from 1952 through the mid-1960s, waste oils were applied to the ground for dust control. Some of the areas that were sprayed with the waste oils have been excavated and concreted and/or built over.

Operable Unit	Site Number	Site History & Suspected Contaminants of Concern
OU-3 (cont.)	14	Battery Acid Disposal Area. From 1977 to 1983, batteries from base vehicles were drained onto the soil and surface water runoff from washing down the asphalt drained onto this area. Paints were also reportedly disposed of. Contaminants of concern include battery acid, paints, lead and other priority pollutant metals, waste oils, methylene chloride, and other solvents.
	15	Suspended Fuel Tanks. From 1979 through mid-1984, two 500-gallon elevated-diesel tanks were located at this site. Reportedly, these tanks had diesel constantly leaking from fueling hoses and nozzles onto the soil beneath them. The tanks were removed from the site in 1984.
	16	Crash Crew Pit No. 2. From 1972 to the present, this area has been used for Crash Crew practice training to extinguish fires. Contaminants of concern include JP-5 fuel, leaded aviation gasoline, hydraulic fluid, crankcase oils, napalm, white phosphorus, magnesium phosphate, and other waste oils.
	19	ACER Site. From 1964 to 1987, six 20,000-gallon JP-5 fuel aboveground storage bladder tanks were placed at the facility. Minor leaks and spills occurred throughout the operational period of the facility. In 1986, 15,000 gallons of JP-5 fuel were spilled due to a bladder tank rupture. The tanks were then removed and much of the contaminated soil was excavated and disposed of.
	20	Hobby Shop. Since 1967, military personnel have used the facilities at the Hobby Shop to service their privately-owned vehicles. Contaminants of concern include kerosene, waste oils, and heavy metals.

Operable Unit	Site Number	Site History & Suspected Contaminants of Concern
OU-3 (cont.)	8	DPDO Storage Yard. The DPDO Storage Yard has been used since the mid-1970s as a storage area for various scrap and salvage materials, including mechanical and electrical components, and the storage of containerized liquid of unknown composition. Contaminants of concern include various scrap and salvage materials and PCBs.
	9	Crash Crew Pit No. 1. Used from 1965 to 1971 for fire-fighting training. The pit was filled with water and layered with 100 to 500 gallons of JP-5 fuel, aviation gasoline, and other liquid wastes. The liquid was ignited and used in fire-fighting training.
	11	Transformer Storage Area. Used from 1968 to 1983 to store about 50 to 75 transformers. About 60 gallons of PCB oil may have leaked onto concrete pads during this period. In 1983, the transformers were removed and disposed of off-station.
	12	Sludge Drying Beds. From 1943 to 1972, a secondary wastewater treatment plant was operated onsite. Sludge from the plant was dewatered in a nearby drying bed. When the wastewater treatment facility was closed, the sludge may have been abandoned in the drying beds and eventually plowed under. Contaminants of concern are heavy metals, such as silver, copper, arsenic, cadmium, lead, selenium, and zinc.
	13	Oil Change Area. Based on previous studies, about 7,000 gallons of crank case oils were drained from heavy equipment directly onto the ground. This practice was conducted through 1983. Contaminants of concern include waste oils, metals, and PCBs.

Operable Unit	Site Number	Site History & Suspected Contaminants of Concern
OU-2 (cont.)	17	Communication Station Landfill. Used from 1981 through 1983 as a basewide disposal facility. Wastes that could potentially be found in this landfill include domestic waste and rubble, cooking grease, oils and fuels from sumps, empty drums, and other unknown materials.
OU-3	1	Explosive Ordnance Disposal (EOD) Range. It is not known how long this site has been used for EOD operations. The site is normally used for the detonation and disposal of small munitions, such as flares and small ordnance. Contaminants of concern are FS smoke, low level radioactive material, metals, nitrated toluene, and sulfates and acidic wastes from the FS smoke disposal operations.
	4	Ferrocene Spill Area. In August 1983, about 5 gallons of ferrocene and hydrocarbon carrier solution was spilled onto the ground accidentally. Vegetation around the drainage ditch where the Ferrocene mixture had drained was visibly stressed after the spill.
	6	Drop Tank Drainage Area No. 1. From 1969 to 1983, aircraft drop tanks were routinely transported to this area where the remaining fuel would be drained and the remnants of JP-5 fuel were washed out on the concrete apron. The fuel and wash/rinse water would drain off the concrete apron onto the adjacent grassy area. Contaminants of concern are JP-5 fuel and waste lubricant oils.
	7	Drop Tank Drainage Area No. 2. From 1969 to 1983, aircraft drop tanks were drained and washed of residual JP-5 fuel just north of Hangar Building 295. Fuel and wash/rinse water would drain onto a nearby grassy area. Contaminants of concern include JP-5 fuel and waste oils.

Operable Unit	Site Number	Site History & Suspected Contaminants of Concern
	21	Material Management Group, Building 320. From 1964 to 1986, drums containing chemicals were stored outside Building 320. Potential contamination may have resulted from stored drums leaking.
	22	Tactical Air Fuel Dispensing System. The site has had a history of spillage and leakage of fuel during routine operations.
OU-4	Various	Sites identified for future inclusion in the RI/FS, following completion of a RCRA Facility Assessment. The possible sites include abandoned sewer lines, waste underground storage tanks, and other solid waste management units.

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