



EPA

McColl Superfund Site

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY • REGION IX • DECEMBER 2005

EPA Updates Groundwater Strategy at McColl

The purpose of this fact sheet is to inform you of minor changes being made to a groundwater cleanup plan at the McColl Superfund Site in Fullerton, CA.

The U.S. Environmental Protection Agency (EPA) conducts a formal review of cleanup progress at Superfund sites like McColl every five years, dating from when construction of the cleanup started.

The purpose of the review is to investigate any changes in environmental conditions at the site and to make sure the cleanup is still effective. It provides EPA with a detailed scientific and engineering assessment of the cleanup effort.

EPA completed its First Five-Year Review for the McColl Site in September 2002. The review concluded that the cleanup is still functioning as intended.

However, it did recommend some minor changes to the cleanup.

As part of the review, EPA considered the groundwater cleanup selected in the Groundwater Operable Unit Record of Decision, dated May 9, 1996 (Groundwater ROD). The review found that the chemical class of compounds known as Tetrahydrothiophenes (THTs) no longer adequately predicts the movement of groundwater contamination at the Site, as was presumed in the Groundwater ROD.

Hence, EPA, the McColl Site Group (the oil industry group that does the cleanup), and the State of California Department of Toxic Substances Control began a study for finding a better way to measure the movement of groundwater contamination. The result is a document known as an Explanation of Significant Differences (ESD). The ESD was signed on September 1, 2005. This fact sheet summarizes the ESD.

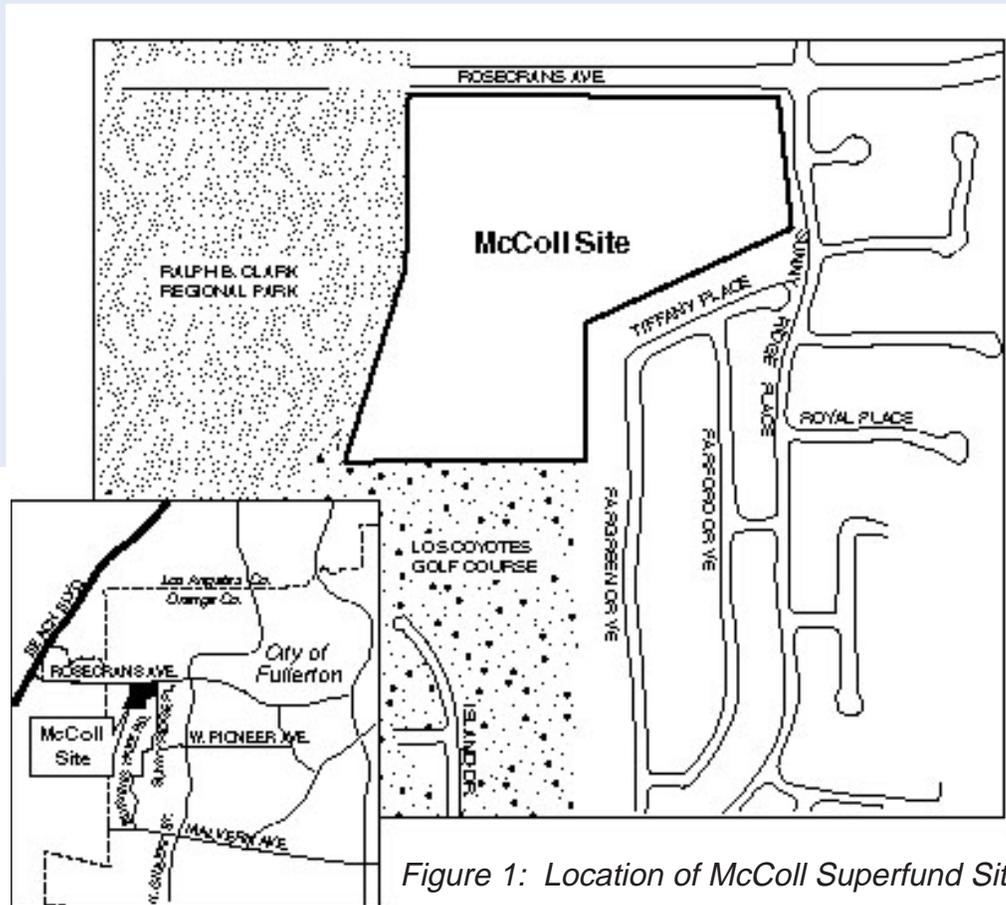


Figure 1: Location of McColl Superfund Site

What does the ESD Recommend?

The ESD selects benzene as the new chemical for predicting groundwater contaminant movement. The ESD also states that the EPA will carry out further cleanup actions if it finds the off-site groundwater to be unsafe for human health. Currently, all groundwater off-site is safe for human health consumption. Furthermore, neither the groundwater under the Site nor next to the Site is used as a source of drinking water.

What are the features of the cleanup selected in 1996?

The Groundwater ROD selected the following remedy:

(1) Manage surface water running onto the Site property.

- (2) Line existing drainage channels with water-resistant materials.
- (3) Grade or modify (through placement of water-resistant soils) areas next to the Source Operable Unit closure containment system.
- (4) Monitor groundwater to evaluate the effectiveness of the selected remedy.
- (5) Carry out institutional controls if the regional aquifer beyond the Site boundary is found to contain Site-specific contaminants above *Maximum Contaminant Levels* (MCLs); or, in the case of Tetrahydrothiophenes (THTs), above the recommended or revised Preliminary Remediation Goal.

This ESD changes element (5) of the remedial action as described below.



Figure 2: Los Coyotes Golf Course

What are the changes resulting from this update?

The ESD establishes benzene as the new chemical component to predict groundwater movement for the following reasons:

- Benzene, a known human carcinogen, is a better chemical trigger for a revised risk assessment and/or further cleanup actions. It is more directly tied to the potential health impacts from groundwater contamination. In the groundwater risk assessment and Groundwater ROD, risks from benzene were the most significant.
- There is a well established MCL for benzene, under the Safe Drinking Water Act.
- Data collected during implementation of the remedial action has shown that benzene predicts, more accurately than THTs, the behavior of the most toxic Site-related contaminants in groundwater.

The ESD changes element (5) above, of the selected remedy, to the following:

(5) Immediately begin a revised risk assessment if benzene is found to be present at levels at or above the MCL in one or more of the McColl Superfund Site's offsite monitoring wells (specifically in the C and/or D zone as defined in the Groundwater Operable Unit ROD).

Should the revised risk assessment show that cancer or non-cancer risks fall outside of acceptable exposure levels, EPA may require additional remedial measures, including institutional controls, which may include selected land use restrictions.

EPA emphasizes that the cleanup continues to function as intended. The ESD ensures that EPA uses the best measure to evaluate the potential for offsite movement of groundwater contaminants.

Information Repositories

EPA Superfund Record Center

95 Hawthorne Street
San Francisco, CA 94105
415-536-2000
Hours:
M-F, 8AM-5PM



Fullerton Public Library

Local History Room
Suite 403S
353 W. Commonwealth Ave.
Fullerton, CA 92832
714-738-6326
Hours:
M-Th, 10AM-9PM
Fri, 10AM-6PM
Sat, 10AM-5PM
Sun, 1PM-5PM

Site History

The McColl Superfund Site is located in Fullerton, California. The northeast corner of the Site is located at the intersection of Rosecrans Ave. and Sunny Ridge Dr.

From 1942-1946, the McColl Superfund Site served as a petroleum refinery waste disposal area. Approximately 72,600 cubic yards of waste were deposited in twelve pits, or *sumps*, at the Site and covered with fill. Waste seeps, which developed at the surface of the Site in the late 1970s, resulted in complaints from nearby residents about odors and potential health impacts. The Site became listed under Superfund when the EPA put it on the National Priorities List in September 1982.

Having since been cleaned up and rehabilitated, the Site is now fenced entirely within the boundaries of the Los Coyotes Country Club where Club members enjoy playing golf.

U.S. EPA Updates Groundwater Strategy at McColl Superfund Site

Contact Information

This ESD will become part of the Site Administrative Record. You may review the Site Administrative Record at the Information Repositories listed below. Contact information for the EPA and the McColl Site Group is:

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