

State of California
California Regional Water Quality Control Board
Santa Ana Region

June 7, 2013

ITEM: 11

SUBJECT: Update on cleanup activities from the fuel spill to Cold Creek that occurred on April 26, 2013

DISCUSSION:

See attached report, dated May 22, 2013

RECOMMENDATIONS:

This is an Information item that does not require Board action.

Santa Ana Regional Water Quality Control Board

**REPORT TO THE REGIONAL BOARD
CLEANUP FROM FUEL SPILLED TO COLD CREEK
ON APRIL 26, 2013**

On April 26, 2013, a tandem fuel tanker truck lost control and spilled a combined volume of 4,740 gallons of diesel and gasoline onto Highway 38 and into Cold Creek (a tributary to the Santa Ana River). A joint Incident Command was established between the US Forest Service (Federal On-scene Incident Command) and the State Department of Fish and Wildlife (State On-scene Incident Command). The Incident Command requested Regional Board staff participate in providing technical advice to protect the beneficial uses of Cold Creek and the Santa Ana River. In order to protect the users of waters of the Santa Ana River, the Incident Command requested that water be retained behind 7 Oaks Dam to prevent the potential for fuel getting beyond the Dam.

Initial cleanup efforts consisted of removing contaminated soil adjacent to Highway 38, as well as flushing and capturing fuel caught up in Cold Creek sediments and rock fissures. Approximately 315 tons of soil was removed adjacent to Highway 38, and it was estimated that 830 gallons of fuel were recovered from the soil. Flushing operations to date have captured another 146 gallons of fuel. After opening Highway 38, additional efforts have been expended to remove another 200 tons of contaminated soil adjacent to Cold Creek on the upstream side the Highway 38 culvert.

Within Cold Creek, it was observed that initial flushing operations were unable to remove sufficient fuel from sediment pockets and recesses downstream of Highway 38. As a result, an alternative method of sediment washing began using high volume low pressure pumps along the Creek banks and settling areas. Approximately 1000 yards of Cold Creek have been washed resulting in a significant amount of fuel recovery. As work crews have progressed downstream within Cold Creek, the terrain has become inaccessible. It is anticipated that only passive recovery methods midway between Highway 38 and Cold Creek's confluence with the Santa Ana River can be deployed for future removal.

Sampling by Regional Board staff at the confluence of Cold Creek and the Santa Ana River, and at several other locations, have resulted in non-detects for petroleum constituents. Staff have only observed a sheen at the confluence, however sample results have not detected petroleum. Staff have also sampled within the Santa Ana River at several locations further downstream and have not observed sheen nor have the sample results shown anything other than non-detect for individual petroleum constituents. The water that is being held behind 7 Oaks Dam has also been sampled several times and has shown non-detect in every instance.

A portion of water from the Santa Ana River is used, in part, to run two hydrogenation facilities operated by Southern California Edison. This water is captured in a series of conveyance works before being released back into the Santa Ana River or conveyed to multiple downstream water users. At the time of the incident, the water that was being conveyed within this system was stopped, resulting in approximately one million gallons retained within the system. It was thought that there was a potential that a slug of fuel was caught up in the system. To address this concern, 20 Baker Tanks were placed at the end of the pen stock pipe, and 400,000-gallon batches were released to the tanks for analysis prior to discharge to the Santa Ana River. As of May 22nd, two batches have been analyzed and found to be non-detect for petroleum constituents. This water was sub-sequentially released to the Santa Ana River downstream of the 7 Oaks Dam. A treatment contingency plan has been established should fuel be detected in any of the Baker Tanks.

Cleanup operations are expected to end by the week of June 3, 2013. Longer term monitoring will continue until the data shows that the potential for fuel entering surface waters is non-existent.