Trichloroethylene detected at the Windmill Well

The windmill well, also designated well OS-21, is located in the far southern section of the Runkle Canyon Property adjacent to the SSFL property line. The distance between well OS-21 and the proposed residential development is approximately 5,000 feet. The well is equipped with a windmill powered pump and has been used historically to supply water for cattle. The windmill still exists at the well site but is disconnected from the pump.

The well was sampled and analyzed for volatile organic compounds (VOCs) 46 times between 1987 and 2005. One VOC, Trichloroethylene (TCE) was detected in samples collected from OS-21 four times. The TCE concentrations ranged from 0.026 g/l to 2.7 g/l. The drinking water standard for TCE, known as the maximum contaminant level (MCL), is 5 g/l. In each of the four times TCE was detected, the concentration was below 5 g/l. Due to the limited number of times TCE has been detected in well OS-21, and because the concentrations were below the MCL for TCE, DTSC does not consider the TCE detections a risk to human health and the environment. Because there is no risk to human health and the environment no further action is needed.

Perchlorate Detected in Soil

During an investigation performed in 2003, two samples of muddy water were collected during drilling. The consultant for the property owner submitted the samples for perchlorate analysis. The laboratory was not able to analyze the sample as a water sample because it was too muddy, so the samples were analyzed as soil samples. The two samples were designated HS-25-56 and HS-26-37, and they had perchlorate concentrations of 0.06 mg/kg and 0.05 mg/kg, respectively. Four other soil samples, and four water samples were collected at the same time, and analysis of these eight samples did not detect perchlorate.

Based on the detections of perchlorate in samples HS-25-56 and HS-26-37, the Los Angeles Regional Water Quality Control Board (LA Board) directed the property owner to install groundwater monitoring wells to collect and analyze groundwater for perchlorate. The wells, designated MW-1 and MW-2, were installed in May 2004.

In accordance with work plans approved by the LA Board, the two wells were sampled five times. Perchlorate was not conclusively detected in any validated sample. One duplicate groundwater sample from MW-2 contained perchlorate at an estimated concentration of 0.33 g/l. However, data validation conducted for this sample indicated that the detection was consistent with laboratory error. It should be noted that the drinking water standard for perchlorate is 6 g/l, which is higher than the questionable detection of 0.33 g/l.

Because perchlorate was not detected in either MW-1 or MW-2, the LA Board did not consider perchlorate a threat to human health or the environment. DTSC concurs with

this conclusion; consequently, no further action is needed to investigate perchlorate in groundwater.

Perchlorate was detected in soil at depths of 56 and 37 feet below ground surface at concentrations of 0.05 and 0.06 mg/kg. The EPA regional screening level for perchlorate, in a residential land use scenario, is 55 mg/kg. Because the perchlorate was detected at concentrations much lower than the EPA regional screening level, no further action is needed to investigate or mitigate the perchlorate detected in soil.

Burro Flats Fault

DTSC does not believe that the Burro Flats Fault serves as a migration pathway for dioxins in groundwater. Dioxins are not soluble, so they would not be transported in groundwater. Any detections of dioxins on the SSFL property will be investigated as a part of the work being done on that property.