

Carbon Tetrachloride Pollution at Fort Ord

Carbon tetrachloride (referred to as CT in Army documents) is a cleaning fluid and contaminant released by the Army into the soil at Fort Ord. CT becomes a vapor quite easily and has adverse health effects on the liver and central nervous system. The Army found CT in groundwater and in the soil beneath Preston Park in 2003 and has been cleaning up the contamination. The CT in the soil and in the groundwater are treated differently because one is a vapor and the other is dissolved in groundwater.

How is the carbon tetrachloride being treated?

The current method of cleanup is a type of **bioremediation**, which means that living organisms are used to lower the contamination concentrations. In the CT contamination on Fort Ord, bacteria that already live in the soil and groundwater break down CT by using it during digestion. At Fort Ord, the Army is feeding the bacteria with lactate piped into the ground (known as injections). The lactate is that same as your muscles produce during hard exercise. By increasing the amount of available food, more bacteria grow and the breakdown process is encouraged at a faster rate. After digestion, the breakdown products are nontoxic or far less toxic than the original carbon tetrachloride.

The Army treated the CT vapor in soil beneath Lexington and Ready Court by putting pipes into the ground and attaching a vacuum to the pipes to suck the air from the soil. After the air was separated, the CT and other contaminants were filtered out. This system operated for several months in 2004 and then was shut off. Additional air samples were taken of the vapor in the soil to see if the CT had returned or remained low after the suction pumps were turned off. The last samples for CT in soil vapor were in April 2008.

A protective margin of safety

The Army's report* on CT soil vapor cleanup could improve its protection of human health for two reasons. First, the samples from 2008 indicate that the CT concentration has fallen dramatically, but in reality, it is only about 10% below the amount considered "safe." Just because the levels have dropped does not mean that they remain low months later. Rather than halting remediation activities as it has planned, the Army needs to continue to monitor the carbon tetrachloride plume and be prepared to take further action to continue to reduce the concentrations.

Secondly, the Army tested CT in April 2008 but failed to alert FOEJN and the public about new data until the publication of its pilot study results in January 2009, a full nine months after the testing. The Army has a duty to present all of the information relevant to the cleanup process to you, the citizens. By withholding information, the Army appears to be hiding details from the citizens or is simply neglectful of its duties to update the public.

* The report is available online www.fortordcleanup.com. Search "Draft Close Out Report Pilot Soil Vapor Extraction and Treatment Operable Unit Carbon Tetrachloride Plume" in the Administrative Record.

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