



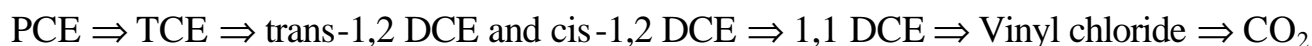
Interlachen Community Fact Sheet #3

Groundwater Contamination in East Multnomah County

Technical Report EWR-3-96

Chemicals of Concern

The following compounds are Chemicals of Concern (COC) for groundwater identified at the project site. The original chemicals are chlorinated solvents, such as PCE and TCE, which were used at both sites in vapor degreasers or to clean metal parts. Both PCE and TCE have discrete degradation pathways as shown below.



Tetrachloroethylene (PCE)

Concentrations of PCE on-site and off-site have ranged from 55 ppb to 210 ppb. PCE has been detected in 52% of the groundwater samples and 5% of the surface water samples, with most detections exceeding the Maximum Concentration Limit (MCL) of 5 ppb.

Trichloroethylene (TCE)

TCE has been detected more often than any other chemical, and at high concentrations in the groundwater, both on and off-site. Concentrations have been detected as high as 24,000 ppb in the groundwater and 5,500 ppb in the soil near the former waste coolant USTs. TCE has been detected in 79% of groundwater samples and 69% of surface water samples.

Cis-1,2-dichloroethene (DCE)

DCE has been detected in 71% of groundwater samples and 60% of surface water samples. TCE concentrations frequently exceed the MCL for drinking water (70 ppb) with the highest levels reaching 13,000 ppb in groundwater. DCE has been detected in the surface springs as well.

Vinyl chloride

Vinyl chloride, the most toxic of the degradation products of PCE and TCE, has been detected in 11% of groundwater samples, frequently above the MCL of 2 ppb. Vinyl chloride has been found to be restricted to the area around the former waste coolant USTs and has not been detected at Shepard or Taggart Springs.

Chromium

Chromium, a heavy metal with an MCL of 100 ppb, has been found in 13% of groundwater samples and in soil at concentrations of 1,430 ppm near the former Cascade chrome plating plant. Sludge waste disposal areas were also found to contain detectable levels. Shepard Spring and Taggart Spring have not been impacted by chromium.

Manganese

Manganese, also a heavy metal, has been found in 41% of groundwater samples, primarily in areas where volatile organic compounds have been detected.

Other Compounds

TCA , MEK, Toluene were used extensively on-site, but have not been classified as a COC since these are based only on groundwater concentration and not soil concentrations.