

Union Pacific Railroad Derailment Site Kingfisher, Oklahoma

Location: The site is located in Kingfisher County, Oklahoma, at the UPRR Enid subdivision rail line right-of-way, at milepost 372.8, approximately one half mile south of the Cimarron River.

Background: In April 1995, a train derailment resulted in the release of approximately 3,000 gallons of carbon tetrachloride (CT) into the subsurface.

Air: No known permit issues.

Soil: Sandy alluvium at shallow depths with an underlying weathered shale unit.

Surface Water: The Cimarron River is located approximately half a mile downgradient of the release area. An intermittent creek is present downgradient of the release site. This creek discharges to the Cimarron River.

Groundwater: Groundwater is impacted by carbon tetrachloride and its associated degradation products, chloroform, methylene chloride, and chloromethane. The Cimarron River is believed to be acting as a hydraulic divide, effectively limiting the downgradient flow of the carbon tetrachloride plume and forcing the plume to move laterally along the river.

Private/Public Wells: Private wells have been identified in the area. Testing of these wells do not indicate that they have been impacted.

Vapor Intrusion to Indoor Air: No known vapor intrusion issues at this time.

Key Questions:

- **Have all known groundwater contaminant plumes been adequately evaluated and delineated?** Currently being characterized
- **Has the site been sampled for an adequate list of analytes?** Yes
- **Does soil or waste need to be cleaned up?** Currently being characterized. There is no known shallow soil contamination.
- **Has the surface water been sampled?** Yes. Portions of the stream show impact at various times of the year.
- **Has soil at the site been cleaned up to levels protective of groundwater?** Currently being characterized. There is no known shallow soil contamination.