

Dowell Schlumberger (Enid)

(September 7, 2016)

Location: The site is located at 2200 North 10th Street, Enid, Garfield County, Oklahoma.

Background: The site encompasses approximately 13 acres. Site operations began in the 1950s and were discontinued in 2006. The site resumed operation in 2013 as a satellite facility that stores materials to support oilfield services. Under the monitored Natural Attenuation (MNA) program, site groundwater has been monitored for Volatile organic compounds (VOCs) semiannually since 2009. Remedies for the site include:

- MNA for on-site Shallow Zone groundwater
- Enhanced reductive dechlorination (ERD) for on-site Deep Zone groundwater
- MNA for off-site groundwater

A deed notice and land use restrictions will be filed for the site in fall 2016.

Air: There are no known air quality issues at the site.

Soil: The site soil was contaminated by chlorinated hydrocarbons. A corrective action was implemented in 1997 that included the excavation and off-site disposal of impacted soils. Various environmental investigations indicate that soils and shallow subsurface geology at the site generally consist of silty to sandy clay to a depth of about 35 feet below ground surface (bgs), overlying sand to a depth of about 50 feet.

Surface Water: There is no surface water onsite.

Groundwater: There are two groundwater-bearing zones identified in the alluvial deposits overlying the shale bedrock at the Dowell Enid facility. The uppermost or Shallow zone occur at depths of about 20 to 25 feet bgs. The second groundwater zone, the Deep Zone, is present in the laterally continuous sand that occurs directly above the shale bedrock at a depth of 35 to 50 feet bgs. There is little difference in the measured water levels between the two groundwater bearing zones, suggesting that there may be communication between the zones.

Depth to groundwater is approximately 20 feet in this area. Flow is toward the southeast with a gradient of approx. 0.005 feet/feet. MNA is the remedy for on-site Shallow Zone groundwater and for off-site groundwater. Enhanced reductive dechlorination (ERD) is the remedy for on-site Deep Zone groundwater

Private/Public Wells: No private or public wells are affected.

Vapor intrusion to Indoor Air: There are no known vapor intrusion issues.

Key Questions:

- **Have all known groundwater contaminant plumes been adequately evaluated and delineated?** Yes.
- **Has the site been sampled for an adequate list of analytes?** Yes
- **Does soil or waste need to be cleaned up:** No.
- **Has the surface water been sampled?** There are no surface water issues.
- **Has soil at the site been cleaned up to levels protective of groundwater?** Yes, site cleanup levels are protective of groundwater.