

Barton Solvents, Inc. Former Drumco Facility Valley Center, Kansas



FISHER ARNOLD

PROJECT EXPERIENCE

The Former Drumco Facility located at 201 South Cedar, Valley Center, Kansas, was utilized as a drum reconditioning facility from the early 1960's to the late 1970's. As part of the reconditioning process any residual chemicals in the drums were placed into open pits on the property, along with any drums that could not be reconditioned. Barton Solvents bought the facility in the early 1980's. In an effort to remove the soil source material, all of the drum disposal area was excavated in 1999. Approximately 5,000 drums were removed and properly disposed of off-site.



Fisher Arnold took over the site for the remediation phase after previous assessments of the property were completed. We designed, installed and conducted all remediation activities based on the original assessments. As part of the remediation, all of the impacted soil from the excavation was placed onto an HDPE liner and aerated until concentrations met state requirements. After the soil was remediated, it was placed back into the original excavation. In an effort to remediate the impacted groundwater, a soil vapor extraction/air-sparging system was installed. Additionally, the air-sparging wells were used periodically as injection points for hydrogen peroxide (chemical oxidation). This system operated continuously for about 4 years and as an example of the success, the groundwater concentration of cis-1,2 dichloroethene dropped from an initial concentration of approximately 32,000 parts per billion (ppb) to below the Federal drinking water standard of 70 ppb. The cost for the remediation was approximately \$3.0 Million

Based on the success of the remediation system, this site was being considered for site closure but in 2007 a fire occurred at the facility. This fire caused the release of numerous chemicals stored in aboveground tanks. In addition, the fire suppression water (contaminated by solvents released from the aboveground storage tanks) flowed across portions of the site.

In 2009, Mr. Earnest's design was installed and operated to complete the soil and groundwater corrective action of the VOCs not associated with the tankfarm fire. The system included:

- Fifteen soil vapor extraction (SVE) wells and twenty-six air-sparging (AS) points.
- Lateral PVC piping from the newly installed wells and points to a blower and air compressor, respectively.
- System operation over a four year period after initiation of the air removal and air injection at the newly installed wells and points.

As a result of the remediation system, offsite Groundwater has been remediated to the concentrations below the RSK Manual cleanup standards. Fisher Arnold is continuing work on the site by conducting semi-annual groundwater monitoring and submit semi-annual reports of the results.