

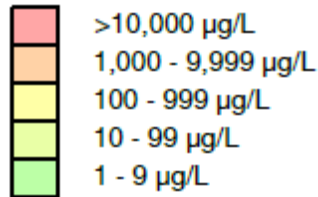
SITE SUMMARY:

Reducing persistent,
low-level PCE
concentrations in
groundwater to
achieve site closure

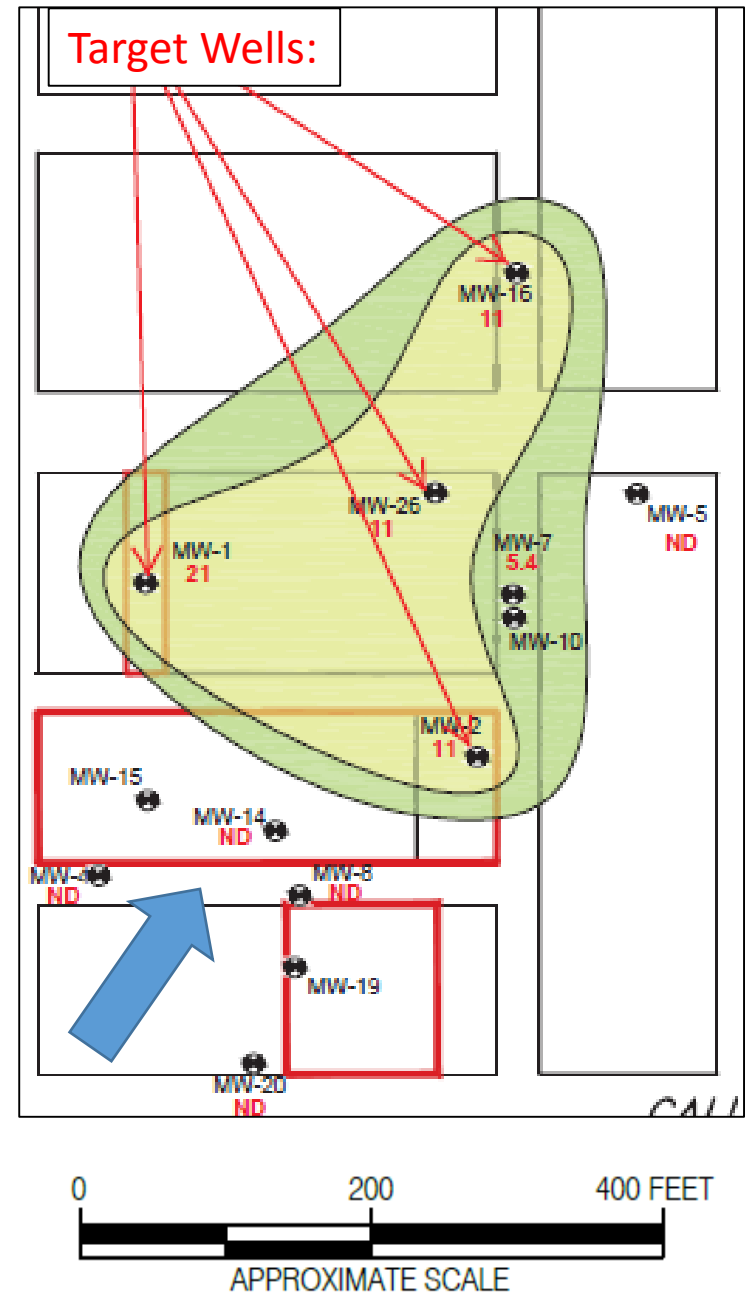


Background:

PCE Concentration



- After 14 years of SVE and 28 years of groundwater monitoring, a handful of off-site monitoring wells remained consistently above regulatory limits for PCE in GW
- Client was obligated to continue GW monitoring and reporting rather than gaining site closure status



Remedial Approach:

- 10' vertical treatment interval
- 8 cylinders per well
- Deployed via cylinder holders compatible with 2" monitoring well construction

- KDEP approved CAP which included installation of SOCORE cylinders into the 4 targeted historical MW's

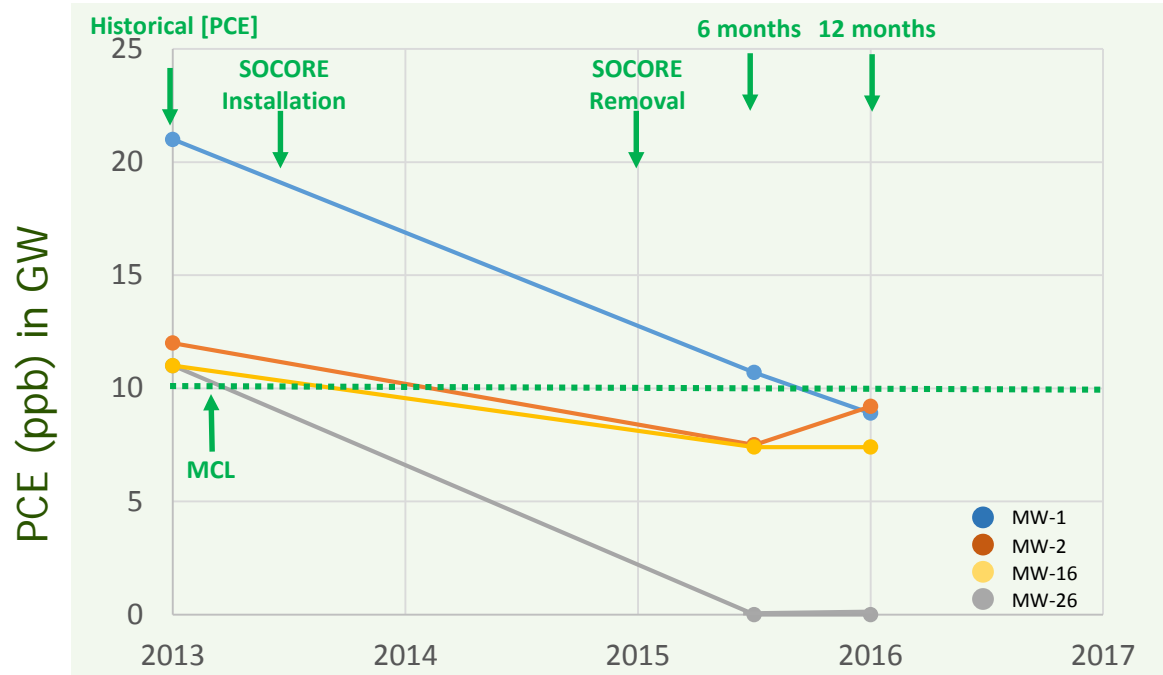
- (4) **2" MWs**, screened **32'-42'** bgs

- (8) 1.35" x 24" SOCORE Permanganate cylinders per well (=32 cylinders plus cylinder holders)



Results:

SITE
CLOSURE



- Installed January 2014 for approximately **\$6500** (cylinders, holders, & field installation)
- Removed SOCORE cylinders and holders 18 months later
- Re-sampled wells at 6 months and again at 12 months after cylinder removal.
- PCE concentrations in target wells were reduced to at or near desired endpoint
- KDEP GRANTED SITE CLOSURE based on stable PCE reduction in groundwater after SOCORE application and subsequent product removal.



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