

Effective Assessment Techniques and Remediation Planning for Oil Fields

Jerome K. Summerlin¹, Robert S. Skiba¹, and Eric K. Snelling²

¹Padre Associates, Inc., Ventura, CA

²Padre Associates, Inc., San Luis Obispo, CA

jsummerlin@padreinc.com

The assessment and remediation of oilfield properties is a unique opportunity for former production properties located throughout central and southern California. Generally, the oilfield properties consist of hundreds of acres of land located within rural areas, which are being encroached upon by urban/residential development. Assessment and remediation methods are abundant; however, the standard assessment and remediation approach generally follows the property transaction scenario that can be both costly and lengthy. Additionally, the standard assessment approach generally results in contaminated soil volume estimates and remediation costs that are overly optimistic.

Padre Associates, Inc. (Padre) has assisted clients with the assessment, remediation, and regulatory closure of large and small oilfield properties. This experience has helped Padre develop an effective approach to assess and remediate oilfield properties. The fields are decommissioned with the end-state vision of either obtaining site closure designation and returning a lease property to a landowner, or obtaining regulatory site closure status and marketing the property for redevelopment.

The assessment and remediation approach is based on the following primary objectives:

- Determine potential planning thresholds for remediation;
- Obtain data to bracket potential contamination volumes using Phase I ESA components;
- Use high-confidence-level assessment data obtained from other sites to develop initial contaminated soil estimates to perform "reality checks" pertaining to contaminated soil volume estimates;
- Use analytical data to close gaps pertaining to unknowns that could significantly change the identified brackets;
- Accept broader brackets of potential remediation costs in exchange for reduced ESA costs; and
- Spend more resources on remediation and site closure and less on assessment activities.