

**PETROLEUM STORAGE TANK RELEASE TRUST FUND**

**SUMMARY SITE ASSESSMENT**

**REQUEST FOR PROPOSAL**

**REVISION 7**



**Kansas Department of Health and Environment  
Bureau of Environmental Remediation  
Storage Tank Section  
1000 SW Jackson, Suite 410  
Topeka, KS 66612-1367**

# Summary Site Assessment Guidelines

A Summary Site Assessment (SSA) and Remedial Design Plan (RDP) will be combined for this scope of work. The purpose of combining the SSA with remedial design activities is to expedite the investigation and remediation process. SSA/RDP combined sites are considered high priority by KDHE. Please refer to most current Kansas Petroleum Storage Tank Release Trust Fund Policy and Procedure Manual for penalties associated with exceeding established deadlines.

It will be the responsibility of the vendor to properly schedule field and laboratory activities (including appropriate bidding to cover rapid subcontractor turnaround) to ensure that the project tasks remain on schedule.

The goal of the SSA is to determine site specific subsurface sediments; determine the nature and approximate extent of contamination in subsurface soil and groundwater; determine the general direction of groundwater flow; identify all potential receptors; and provide the information necessary to direct further drilling and pilot testing. All applicable guidelines and definitions in the current version of the RDP Request for Proposal (RFP) will also apply to the SSA. The SSA will consist of preparing the required SSA Field Work Plan Worksheet; completing the outlined scope of work in accordance with the RDP RFP; and preparing the SSA Report. **Following the review of the SSA Report, it may be determined by KDHE that the site does not present a significant risk to human health or the environment. KDHE reserves the right to discontinue the scope of work as outlined in the SSA/RDP bid package.**

A description of work and general requirements and procedures is as follows:

The KDHE Summary Site Assessment Field Work Plan Worksheet (Attachment 1) will be completed by the consultant and must be approved by KDHE before field work is initiated.

Various subsurface investigative technologies may be included in the scope of work as outlined by the KDHE project manager. Groundwater and soil samples will be collected during the investigation. Groundwater samples will be analyzed for **volatile organic compounds (VOCs)** and **polycyclic aromatic hydrocarbons (PAHs)**. Soil samples will be analyzed for benzene, 1,2 DCA, and total petroleum hydrocarbon (TPH) ( Low, Middle, and High Range Hydrocarbons). All samples will be analyzed by a KDHE certified laboratory using KDHE approved analytical methods. The scope of work for the SSA phase is provided on the bid proposal sheets and in the worksheet entitled Site Specific Information.

KDHE will either approve or submit comments for the SSA Report within **30** calendar days. The SSA Report must be approved by KDHE before the RDP phase of work is initiated. Upon approval of the SSA Report, one electronic copy, in PDF format (.pdf) must be submitted to KDHE on a CD. KDHE may also request, electronic files in original format at no additional costs. The report must contain a pocket within the report to store the CD.

The text of the SSA report will contain a brief description of the field work performed, a brief description of the subsurface sediments, the nature and extent of contamination, groundwater flow direction, details about the treatment and/or disposal of waste water and soil and any recommendations concerning the remainder of the project based on the SSA. The following tables will be submitted using the formats outlined in the RDP RFP:

Table 1	Summary of Work Completed
Table 2	Water Well Information - This table will include:
	<ol style="list-style-type: none"> <li>1. Well owner's name;</li> <li>2. Section, Township, and Range to three quarters (four quarters if well is sampled or located during the SSA, or if it is used as a public water supply);</li> <li>3. Use of each well using the description from Section 4 of the WWC-5 form that best describes the well use;</li> <li>4. Approximate distance between the well and the contaminant plume;</li> <li>5. Location of the well in relation to the contaminant plume and groundwater flow (e.g. down gradient, cross gradient).</li> <li>6. Information about all wells within a 1/4 mile radius of the site will be collected by, conducting a search of water well records through the KDHE Bureau of water (BOW), discussing the location of public and private water supplies in the area with city and/or county personnel, and conducting a house-to-house reconnaissance of the area within the suspected extent of the groundwater contamination plume and 400 feet outside the suspected extent of the groundwater contamination plume if private wells are found or suspected to exist in the area. PWS wells should be designated with the same numbers assigned by the BOW. All wells should be designated consistently throughout the report.</li> </ol>
Table 3	Well Completion Information
Table 4	Groundwater Analytical Results
Table 5	Soil Field Screening and Laboratory Results
Table 6	Data from any other investigative technologies used. (If applicable)

The following figures will be submitted using the formats outlined in the RDP RFP:

Figure 1	Site Base Map
Figure 2	Groundwater Isoconcentration Maps
Figure 3	Groundwater Flow Map
Figure 4	LNAPL Isopach Map
Figure 5	Soil Isoconcentration Maps
Figure 6	Geologic Cross Section - A (through area(s) of highest detected contamination; must include the following :)
	<ol style="list-style-type: none"> <li>1. Sediment units of each boring</li> <li>2. All field screening data, laboratory analytical results and product thickness plotted relative to depth</li> <li>3. Estimated water table</li> <li>4. Potential receptors or flow paths for contaminant/vapor</li> </ol>

- migration
- 5. Vertical and horizontal scale bars with vertical exaggeration noted
- 6. Sediment legend
- 7. Reduced map of the site with wells and borings plotted that depicts the orientation and labeled reference points for the sections

Figure 7 Geologic Cross Section - B (only required if six or more borings advanced; same requirements as listed in Figure 6)

The following information will be provided in appendices using the formats outlined in the RDP RFP:

- Appendix 1 Drilling Logs
- Appendix 2 No Longer In Use
- Appendix 3 KDHE Water Well Records
- Appendix 4 Laboratory Data
- Appendix 5 Field Notes
- Appendix 6 Off-site Waste Handling Documentation and a table of On-site Waste handling Results

The remainder of the scope of work will proceed as specified in the RDP RFP except that a Response/Approval deadline is set and only one round of groundwater sampling will be conducted during the RDP phase. This round of sampling will be performed after installation and development of additional wells.

The RDP scope of work will include installation of additional wells, pilot testing, additional soil and groundwater sampling, development of a Remedial Design Report and development of a Remedial Design Plan. The RDP due date will be contract sign date plus 395 calendar days.

**PETROLEUM STORAGE RELEASE TRUST FUND  
SSA FIELD WORKPLAN WORKSHEET**

Site Name: \_\_\_\_\_ KDHE Project Code: \_\_\_\_\_

Vendor: \_\_\_\_\_ Vendor Contact: \_\_\_\_\_

Instructions: This form must be completed by providing the information requested below. Do not include any attachments with this worksheet other than those described herein.

**I. Site Information**

Site Address: \_\_\_\_\_  
(Street) (City) (County)

Legal Description: \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ E/W

**II. Investigation Information**

Check the general methodologies to be used: \_\_\_\_\_ EC Logging \_\_\_\_\_ LIF \_\_\_\_\_ Soil Borings \_\_\_\_\_ Monitoring Wells  
 List the requested information where indicated:

**A. Drilling:** (list probing/logging equipment under column "A" and under column "B" list drilling equipment to be used)

	<b>A</b>	<b>B</b>
Drill Rig	Brand/Model _____	_____
	Torque Rating _____	_____
	Drilling Fluid _____	_____
Drill String	Type (Augers, etc) _____	_____
	O.D./I.D. _____	_____
Borehole Size	_____	_____
Sample Collection Equipment	_____	_____
Drilling Sample Frequency	_____	_____

**B. Well Construction Materials**

Casing Material and Diameter	_____	_____
Screen Slot Size	_____	_____
Filter Pack Material and Size	_____	_____
Grout Material	_____	_____

**C. Field Screening**

Frequency of Field Screening	_____	_____
Device (Brand / Type / Spec.)	_____	_____
Calibration Standard	_____	_____
Calibration Frequency	_____	_____

**D. Borehole Plugging**

Plugging Material	_____	_____
Procedure	_____	_____

**E. Monitoring Well Development**

Method (bailer, pump, etc)	_____	_____
Minimum Well Volume to be Withdrawn (Drilling Scenario "B")	_____	

**F. Laboratory Analytical:**

Soil Samples	Collection Equipment _____
	Analytical Methods _____
Water Samples	Collection Equipment _____
	Analytical Methods _____
Laboratory to Conduct Analyses	_____

**G. Waste Handling Procedures** – Briefly describe how soil and water will be handled, treated or disposed of:

Soil \_\_\_\_\_

Water \_\_\_\_\_

**H. Decontamination** – Briefly describe decontamination equipment, methods and procedures to be employed:

\_\_\_\_\_

\_\_\_\_\_

**III. Site Maps and Photographs**

Note: All maps and photographs must include a scale, north arrow and legend.

1. Attach a copy of a U.S.G.S. 7.5 minute quadrangle scale 1:24,000, which depicts the general site location and the one mile radius area surrounding the site. The location of the site must be delineated.
2. Prepare and submit with this worksheet a site map in accordance with and containing the following information:
  - a. Scale such that one inch is less than or equal to 50 feet for smaller sites and 1 inch is less than or equal to 100 feet for larger sites.
  - b. Site property boundaries, buildings or other fixed objects and street names.
  - c. One site map will depict the site including minimum of a 350’ radius from the release. The other map will depict the site including a minimum 500’ radius from the release. Both maps will include the general use of surrounding properties; i.e. residential, industrial or business (indicate what type – restaurant, service station, etc.). List owners’ names relative to off-site properties.
  - d. Tanks, lines and pump islands, currently or formerly located at the site.
  - e. General locations and depths of all utilities on and adjacent to the site from visual survey of site.
  - f. If direct push survey is requested: Proposed probe locations for at least the “Groundwater Contamination” scope of work. Include existing wells within 350’ from the source. All wells should be designated in accordance with previous reports, if available.
  - g. If a direct push survey is not requested: Proposed boring and monitoring well locations instead of proposed direct push points must be indicated.
  - h. Accessible easements within the specific area.
  - i. Arrow depicting groundwater flow direction.

Include the most recent aerial photograph available showing the site location and specified area; the maximum scale of the aerial photograph shall be 1 inch = 250 feet. The aerial photograph must be an original print, a high quality color copy of an original print or a blueline. Prominent features (buildings, storage tanks, pump islands, existing wells, etc) should be denoted on the aerial photograph.

**IV. Field Personnel / Health and Safety Plan**

List Vendors’ personnel and any subcontractors that will be involved in the investigation. Indicate each individual’s name and position (attach an additional sheet if necessary). If resumes documenting education, experience and safety training certification have not been provided with the original bid package for all those listed, submit this information with this worksheet.

Name	Position/Title	Name	Position/Title
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**V. Access & Permits**

The Vendor is responsible for obtaining access from facility managers, lessee, and tenant, and/or current property owner, all on-site, and off-site property owners (see RDP RFP Section 3.5).

The Vendor is responsible for securing and complying with any and all federal, State of Kansas, county, city and local permits and regulations regarding the Scope of Work defined in this SSA/RDP.

Provide documentation in the spaces below.

Name	Position/Title	Date of Contact	Subject (e.g. landfarm permit)
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____