

# Exhibit A-1 Scope of Services - Supplemental

Lake San Antonio Resort/Marina Site, K/J B13139, September 30, 2014

# **Scope of Services**

This scope of services is in addition to the Scope of Services attached to the original Agreement dated 03/05/14 and includes additional site characterization, preparation of a conceptual site model, and revisions to the Remedial Action Plan (RAP), as follows:

# **Task 1 - Project Management**

This task includes routine project communications with the County, monitoring and communicating the status of the schedule and budget. This task also includes Kennedy/Jenks quality assurance procedures. For purposes of this scope of services, it is assumed that the services to be provided under this supplemental Scope of Services will be completed within twelve weeks and that project management will be provided for that duration. Project management will only be provided for the tasks included in this scope of services.

### Task 2 - Additional Site Characterization

Kennedy/Jenks will conduct a site investigation to assess whether there is residual soil contamination in the roadway area of the Site, to evaluate down gradient soil and groundwater conditions along the boat ramp at the Site, and to characterize deeper groundwater. Subtasks and assumptions for this task include the following:

# **Subtask 2.1 - Work Plan Preparation**

Kennedy/Jenks will prepare a work plan to document the proposed sample locations and analyses and will submit the work plan to the Regional Board for review and comment prior to the sampling activities.

A draft of the work plan will be provided to the County for review and comment as an electronic version. After receipt of comments from the County, the work plan will be finalized and submitted to the Regional Board. For purposes of this supplemental scope, it is assumed that the Regional Board will not require revisions to the work plan.

# **Subtask 2.2 - Prefield Activities**

Kennedy/Jenks will contact USA Alert and subcontract with a private utility locator for utility clearance, prepare a site-specific Health and Safety Plan, and obtain boring permits from Monterey County. Kennedy/Jenks will also subcontract with a State-licensed drilling

contractor to collect the samples and install the wells as described in the following subtasks 2.3, 2.4, and 2.5.

#### Subtask 2.3 - Residual Soil Assessment

For purposes of this Supplemental Scope of Services, it is assumed that three (3) borings will be advanced to groundwater or a maximum depth of 45 feet below ground surface (bgs) in the roadway area. Soil samples will be collected from designated sampling intervals for a total of 27 samples. One reconnaissance groundwater sample will be collected from each of the borings if groundwater is encountered. Sampling is assumed to be completed in two 10-hour days.

Twenty-seven (27) soil samples will be submitted for laboratory analysis of total petroleum hydrocarbons as gasoline (TPH-G); benzene, toluene, ethyl benzene, total xylenes (BTEX); methyl-tertiary-butyl ether (MTBE); tertiary-butyl alcohol (TBA); and other volatile organic compounds using USEPA Method 8260B. A saturated and unsaturated soil sample from one boring location will be submitted for analysis of total organic carbon, grain size distribution, and moisture content. One soil sample will be submitted for analysis of lead using USEPA Method 6010B. Samples will be analyzed on a normal turnaround basis.

Three (3) groundwater samples will be submitted for laboratory analysis of TPH-G, BTEX, MTBE, TBA, and other volatile organic compounds using USEPA Method 8260B. One groundwater sample will be submitted for laboratory analysis of natural attenuation parameters, including total organic carbon, alkalinity, anions, and metals. One groundwater sample will be submitted for laboratory analysis of lead using USEPA Method 6010B. Samples will be analyzed on a normal turnaround basis.

Four (4) soil vapor samples will be collected from existing sparge wells and field screen for oxygen, carbon dioxide, methane, and total organic vapor.

Soil and water generated during the sampling will be containerized and left onsite. Kennedy/Jenks will arrange for disposal of the residual soil and water when the analytical results are available. It is assumed that the residuals can be disposed of as non-hazardous waste.

# **Subtask 2.4 - Down gradient Assessment**

Six (6) borings will be advanced to groundwater or a maximum depth of 25 feet below ground surface (bgs) in the boat ramp area. Soil samples will be collected from designated sampling intervals for a total of 30 samples. One reconnaissance groundwater sample will be collected from each of the borings if groundwater is encountered. One of the borings will be converted to a monitoring well (the cost associated with developed and sampling of the well is included in Subtask 2.5). Sampling is assumed to be completed in three 10-hour days.

Thirty (30) soil samples will be submitted for laboratory analysis of TPH-G, BTEX, MTBE, TBA, and other volatile organic compounds using USEPA Method 8260B. A saturated and unsaturated soil sample from one boring location will be submitted for analysis of total organic carbon, grain size distribution, and moisture content. Two soil samples will be submitted for laboratory analysis of lead using USEPA Method 6010B. Samples will be analyzed on a normal turnaround basis.

Six (6) groundwater samples will be submitted for laboratory analysis of TPH-G, BTEX, MTBE, TBA, and other volatile organic compounds using USEPA Method 8260B. One groundwater sample will be submitted for laboratory analysis of natural attenuation parameters, including total organic carbon, alkalinity, anions, and metals. One groundwater samples will be submitted for laboratory analysis of lead using USEPA Method 6010B. Samples will be analyzed on a normal turnaround basis.

Soil and water generated during the sampling will be containerized and left onsite. Kennedy/Jenks will arrange for disposal of the residual soil and water when the analytical results are available. It is assumed that the residuals can be disposed of as non-hazardous waste.

# **Subtask 2.5 - Characterization of Deeper Groundwater**

Three (3) borings will be advanced to groundwater or a maximum depth of 45 feet below ground surface (bgs) in the vicinity of existing monitoring well 2 (MW-2). Soil samples will be collected from designated sampling intervals for a total of 27 samples. One reconnaissance groundwater sample will be collected from each of the borings if groundwater is encountered. Two of the borings will be converted into monitoring wells. Sampling is assumed to be completed in two 10-hour days.

Twenty-seven (27) soil samples will be submitted for laboratory analysis of TPH-G, BTEX, MTBE, TBA, and other volatile organic compounds using USEPA Method 8260B. A saturated and unsaturated soil sample from one boring location will be submitted for analysis of total organic carbon, grain size distribution, and moisture content. Two soil samples will be submitted for laboratory analysis of lead using USEPA Method 6010B. Samples will be analyzed on a normal turnaround basis.

Three (3) groundwater samples will be submitted for laboratory analysis TPH-G, BTEX, MTBE, TBA, and other volatile organic compounds using USEPA Method 8260B. One groundwater sample will be submitted for laboratory analysis of natural attenuation parameters, including total organic carbon, alkalinity, anions, and metals. One groundwater sample will be submitted for laboratory analysis of lead using USEPA Method 6010B. Samples will be analyzed on a normal turnaround basis.

The two (2) monitoring wells installed under this subtask and the monitoring well installed under Subtask 2.4 will be developed within 48 hours after installation. Groundwater samples will be collected from each of the wells within 72 hours of the wells having been developed. It is assumed that the groundwater sampling can be completed in one day. Three groundwater samples will be submitted for laboratory analysis of total petroleum

hydrocarbons as gasoline (TPH-G) and other volatile organic compounds using USEPA Method 8260B, for total organic carbon, for alkalinity, for anions, and for metals. Samples will be analyzed on a normal turnaround basis.

Soil and water generated during the sampling will be containerized and left onsite. Kennedy/Jenks will arrange for disposal of the residual soil and water when the analytical results are available. It is assumed that the residuals can be disposed of as non-hazardous waste.

# Subtask 2.6 - Report

Kennedy/Jenks will prepare a report for submittal to the Regional Board to describe the sampling and analysis implementation activities. The report will provide a description of the borings and summary of analytical results for groundwater samples. Estimated time to complete once analysis is completed is ten (10) days.

A draft of the report will be provided to the County for review and comment as an electronic version. After receipt of comments from the County, the report will be finalized within five (5) days and submitted to the Regional Board. For purposes of this scope, it is assumed that the Regional Board will not require revisions to the report.

# Task 3 - Preparation of Conceptual Site Model

Kennedy/Jenks will prepare a conceptual site model that assesses the nature, extent, and mobility of the release at the Site. Existing data for the Site available from GeoTracker will be compiled with data collected as part of Task 2. This data compilation will be used in the Conceptual Site Model report. The Conceptual Site Model report will integrate the historical and current geologic, hydro geologic, soil, groundwater, remedial action, and surface water data. It will evaluate trends in groundwater and soil conditions relative to remedial actions, water levels, and lake levels.

A draft of the Conceptual Site Model report will be provided to the County for review and comment as an electronic version. After receipt of comments from the County, the Conceptual Site Model report will be finalized and submitted to the Regional Board. For purposes of this scope, it is assumed that the Regional Board will not require revisions to the Conceptual Site Model report.

### Task 4 - Revisions to Remedial Action Plan

Kennedy/Jenks will prepare a Revised RAP for the Site based on the outcomes of Tasks 2 and 3. The Revised RAP will summarize the Site conditions, present remedial action objectives, describe the proposed remedy, and present a Work Plan for implementing the remedy.

A draft of the Revised RAP will be provided to the County for review and comment as an electronic version. After receipt of comments from the County, the Revised RAP will be

finalized and submitted to the Regional Board. For purposes of this scope, it is assumed that the Regional Board will not require revisions to the Revised RAP.

#### **Future Services**

The need for future services will be determined following approval of the Revised RAP by the Regional Board. If future services are needed, the parties will engage in appropriate discussion.

# **Budget**

Compensation for services will be provided on a time-and-expense reimbursement basis, in accordance with our Schedule of Charges dated 1 January 2011. The estimated budget for the current scope and level of effort is summarized for each task as follows:

Task	Amount
Task 1 – Project Management	\$7,000
Task 2 – Additional Site Characterization	
Subtask 2.1 – Work Plan Preparation	\$8,700
Subtask 2.2 – Prefield Activities	\$7,500
Subtask 2.3 – Residual Soil Assessment	\$32,300
Subtask 2.4 – Down Gradient Assessment	\$44,500
Subtask 2.5 – Deeper Groundwater	\$48,100
Subtask 2.6 – Report	\$14,500
Task 3 – Preparation of Conceptual Site Model	\$30,600
Task 4 – Revisions to Remedial Action Plan	\$18,800
Total Budget Request	\$212,000

The estimated hours and hourly rate anticipated for the Kennedy/Jenks staff that will be involved with this scope of services are as follows:

Staff	Hourly Rate	Task Hours	1	Task Hours	2	Task Hours	3	Task Hours	4	Total
Laura Kennedy	\$220	22		25		28		6		81
Mike McLeod	\$160	2		221		28		36		287
Rick Teczon	\$195	2		37		20		40		99
Senior Principal	\$235	2		7		1		8		18
Associate Engineer	\$145	-		-		88		-		88
Staff Engineer	\$125	-		62		4		-		66
Project Admin	\$90	4		15		12		9		40
Direct Expenses				\$6,500		\$300		\$300		\$7,100
Subconsultants				\$86,500						\$86,500

<sup>\*</sup>Hourly rates will not change during course of Supplemental Scope of Work.

The budget was developed based upon the scope of services and assumptions presented above. If our underlying assumptions are off target, we can discuss modification of the scope and estimated budget with the County.

# **Project Team**

Laura Kennedy (Engineer-Scientist-Specialist 8) will serve as the Project Manager and will be the primary point of contact for the County. Laura will be responsible for monitoring and management of the team and budget. Laura will coordinate and direct the Kennedy/Jenks project team members.

Mike McLeod, P.G. (Engineer-Scientist-Specialist 4) will serve as the Project Geologist and will provide oversight during the site characterization activities.

Rick Teczon, P.E. (Engineer-Scientist-Specialist 6) will serve as the Project Engineer and will review the remediation conducted to date and assess alternative remedial options.

Other Kennedy/Jenks staff will be used on a task-specific basis, as directed by Laura.

As noted, time estimates assume weather conditions will be suitable for tasks described; if weather deteriorates, Kennedy/Jenks will notify the County and will work to keep as close to schedule as possible. Additionally, if State review requires additional revisions, time schedules and cost estimates need to be revisited.