Harding Lawson Associates

October 2, 1998

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Mr. Chris Stoker
Integrated Environmental Services, Inc.
3990 Westerly Place, Suite 210
Newport Beach, California 92660

Change Order No. 1 and Cost Estimate
Additional Groundwater Sampling
Boeing C-6 Facility, Parcel C
Torrance, California

Dear Mr. Stoker:

As requested, Harding Lawson Associates (HLA) is submitting this change order and cost estimate for the additional groundwater monitoring and sampling discussed with you via telephone on September 22, 1998. HLA understands the goal of this work is to collect depth-to-groundwater measurements and groundwater samples from 18 currently installed onsite monitoring wells in September and October 1998 (total of 36 wells). The original approved contract and cost estimate included monitoring and sampling of only 28 wells.

MONTHLY GROUNDWATER AND SAMPLING

The original contract included development of a Health and Safety Plan, sampling and analysis of 28 monitoring wells (14 wells sampled in September and 14 sampled in October), submittal of a draft letter report covering both monitoring and sampling events, and project management. Our cost also included profiling and disposal of purge water, provided the purge water can be classified as nonhazardous.

Additional activities include the following:

- Collect depth-to-water measurements in 4 additional monitoring wells in September and October 1998.
- Submit up to 8 groundwater samples (4 per month) to Orange Coast Analytical laboratory for analysis of volatile organic hydrocarbons using EPA Method 8260.
- Profile and dispose purged groundwater from the additional wells.
- Include results in a brief written report.

Engineering and
Environmental Services

30 Corporate Park, Suite 400, Irvine, CA 92606 714/260-1800 Fax: 714/260-1830

COST AND SCHEDULE

The additional groundwater monitoring and sampling described in this change order is based on the information provided to HLA at this time. HLA proposes to conduct this scope of work on a time-and-materials basis. HLA's estimated cost to complete this scope of work is $5,035 (see attachment).

Field activities will require 2 days in addition to the original scope (total of 3 days each in September and October 1998). Laboratory analysis will require approximately 1 to 2 weeks. The brief written report will require an additional 3 days. HLA has already completed monitoring and sampling of 18 monitoring wells in September 1998.

We look forward to working with you on this and future assignments. Please contact the undersigned if you have any questions regarding this proposal.

Yours very truly,

HARDING LAWSON ASSOCIATES

Nicholas Hagen
Senior Geologist
Project Manager

James Van de Water, C.HG.
Associate Hydrogeologist

NH/JV/hk
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Attachment: Detailed Cost Estimate

ATTACHMENT

DETAILED COST ESTIMATE

Attachment

Cost Estimate for Monthly Groundwater Sampling - Additional Wells (2 Rounds)
Boeing C-6 Facility

Task 1 - Unchanged

Task 2 - Unchanged

Task 3 - Collect and Analyze Groundwater Samples from 8 Additional Monitoring Wells

Field Technician (Mike Palmer or Wes Haydock)		22 hours	@	$	55	/hr	$	1,210
Markup (Labor)					2%		$	24
Equipment		2 hours	@	$	125	/hr	$	250
Truck		2 days	@	$	60	/day	$	120
Lab Analysis	EPA 8260 GW	4 each	@	$	92.40	/ea	$	370
Lab Analysis	EPA 8260 Field	1 each	@	$	92.40	/ea	$	92
Lab Analysis	EPA 8260 Trip	1 each	@	$	92.40	/ea	$	92
Lab Analysis	EPA 8260 Duplicate	1 each	@	$	92.40	/ea	$	92
Purge Water Storage (630-gal poly tank)		1 each	@	$	1,140	/ea	$	1,140
Profile and Disposal* (assume nonhaz.)		500 gallons	@	$	2	/gal	$	1,000
Markup (Subcontractor)					7%			195.08
			Total Task 3				**$**	**4,586**
NOTE: Profile and Dispose (assume haz./U-code)		500 gallons	@		$4.50	/gal	$	2,250

Task 4 - Data Reporting / Letter Report

Senior Hydrogeologist (Nick Hagen)		4 hours	@	$	90	/hr	$	360
Drafting (Tom LeGrande)		1 hour	@	$	55	/hr	$	55
Word Processing (Heather Khuu)		0.5 hour	@	$	50	/hr	$	25
Markup (Labor)					2%		$	9
			Total Task 4				**$**	**449**

Task 5 - Unchanged

					TOTAL		**$**	**5,035**

Note:

* Purge water estimate based on depth to water
Cost estimate assumes that a forklift is available onsite to place poly tank

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