P & D ENVIRONMENTAL

5106589074;

A Division of Paul H. King, Inc. 4020 Panama Court Oakland, CA 94611 (510) 658-6916

> November 26, 2001 Latter 0067,L17

Ms Eva Chu Alameda County Environmental Health Department 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

SUBJECT:

VAPOR EXTRACTION FRASIBILITY WORK PLAN ADDENDUM

Former Service Station 5330 Footbill Blvd. Oakland, California

Ms Chu:

In accordance with our telephone conversation on November 20, 2001 P&D Environmental, a Division of Paul H. King, Inc., (P&D) is pleased to present this vapor extraction feasibility work plan addendum for the subject site. On October 24, 2001 probes were installed at the site in accordance with the approved work plan for vapor extraction feasibility evaluation. At location B9, probe installation refusal was encountered at a depth of 12 feet below the ground surface. A second attempt at probe installation near the B9 location also encountered refusal at 12 feet. Review of geologic cross-sections for the portion of the site in the vicinity of B9 shows a subsurface sand body. It is P&D's opinion that evaluation of vapor extraction feasibility for this sand body will be an integral part of a feasibility study for this site.

To properly install a vapor extraction probe in the vicinity of the B9 location, P&D will perform the following activities.

o Obtain a permit, as necessary.

Arrange for a properly licensed contractor to drill one borehole and construct one vapor extraction probe. Construction details are provided below.

The borehole for the vapor extraction probe will be drilled using eightinch diameter hollow stem augers and a truck-mounted drill rig. The borehole
will be drilled to a total depth of 20 feet below the ground surface, in
accordance with the original work plan specifications. The probe will be
constructed of 2-inch diameter schedule 40 PVC pipe. The lowermost five feet of
pipe will consist of 0.10 factory slotted pipe. The bottom of the pipe will be
capped. The annular space surrounding the slotted interval and to a height of
one foot above the slotted interval will be filled with a 3/8-inch diameter
gravel. Bentonite pellets or chips will be placed above the gravel to a height
of one foot above the gravel and hydrated. The remaining annular space will be
filled with neat cement grout. The top of the probe will be enclosed in a
traffic-rated vault.

All drilling equipment will be steam cleaned or cleaned with an Alconox solution followed by a clean water rinse prior to use in each borehole. Any soil or water generated during drilling will be stored in drums at the site pending characterization and disposal.

Following agency approval of this work plan addendum and construction of the vapor extraction probe, the vapor extraction feasibility test will be performed in accordance with the original work plan. November 26, 2001 Letter 0067.L17 2

Should you have any questions, please do not hesitate to contact me us (510) 658-6916.

Sincerely,

P&D Environmental

Paul H. King

President California Registered Geologist #5901 Expires 12/31/03

cc: Mr. Keith Simas, Xtra Oil Company

PHK 0067.L17

P & D ENVIRONMENTAL
A Division of Paul H. King, Inc.
4020 Panama Court
Oakland, CA 94611
(510) 658-6916

FAX TRANSMITTAL COVER SHEET

Date: 11 26 01	Job #:
To: Eva Chn	
Company: ACDEH	
From: PAD ENVIRONMENTAL	'ng
Number of pages in this tran	nsmittal, including this cover sheet:
	1111 Blvd, Oakland - Work Plan Addendu
MESSAGE: Eva,	
	phone conversation.
- P. J	
cc: Keith S	Simas Fax 510-865-1889
If transmittal is incomplete P&D Environmental fax number	e, please call (510) 658-6916. r: (510) 658-9074.
DES.	TINATION FAX NUMBER: 510-337-9335