CAMBRIA

#515

June 25, 1999

Mr. Lynn Worthington
Better Homes Realty
5942 MacArthur Blvd.
Oakland, CA 94605

Re: **Interim Measures and Remediation Schedule**
Former Exxon Station
3055 35th Avenue
Oakland, California

Dear Mr. Worthington:

In response to regulator Barney Chan's letter dated June 18, 1999, Cambria presents a scope of work to perform the requested interim measures and the anticipated schedule for implementation of the approved dual-phase extraction (DPE) corrective action. To facilitate reimbursement by the State Underground Storage Tank (UST) Cleanup Fund, a cost estimate for the interim measures is included in Attachment A. To help expedite corrective action, a cost estimate for coordinating electrical service connection by PG&E is also included in Attachment A.

INTERIM MEASURES

Receptor Survey: As requested by Mr. Chan, Cambria will perform a sensitive receptor survey that verifies that no wells of any type are being used within a radius of 200' from the subject property and includes an inspection of residences/buildings within the same radius for the presence of basements or other subsurface structures.

Oxygenation of Groundwater: To increase the oxygen concentrations in all monitoring and extraction wells, Cambria proposes to inject hydrogen peroxide (H_2O_2) into each of the wells. Cambria will add approximately 10 gallons of an 8% solution of hydrogen peroxide into each site well. The hydrogen peroxide solution will be slowly added into each well to approximately 5 ft below top of casing and allowed to infiltrate. The amount of hydrogen peroxide added to each well may vary according to depth to ground water and the permeability of the soil.

SCHEDULE

The anticipated project schedule for implementation of DPE at the site is presented below. The actual schedule is dependent upon permit application approval time, UST Cleanup Fund review time and special requirements, and PG&E responsiveness.

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ENVIRONMENTAL PROTECTION

Oakland, CA
Sonoma, CA
Portland, OR
Seattle, WA

Cambria Environmental Technology, Inc.

1144 65th Street
Suite B
Oakland, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

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June 25, 1999

Corrective Action Schedule

Implementation Task	Date(s)
Remediation Well Installation	Completed
Air Permit Application Submittal (Note 1)	Completed June 2, 1999
Water Discharge Permit Submittal (Note 2)	Awaiting Fund Pre-approval
Electrical Service Installation (Note 3)	Cost Estimate Included; Need Fund Pre-approval
Design and Equipment Bid Package	July 2, 1999
Bid Solicitation and Receipt (15 days)	July 8 - 23, 1999
Fund Review/Pre-approval of Bids (3 weeks)	July 26 - August 13, 1999
Vendor Award	August 16, 1999
System Installation	August 30 - September 15, 1999
Air and Water Discharge Permit Receipt	September 8, 1999
PG&E Upgrade Transformer & Connect Power	September 8, 1999
System Startup	September 15, 1999

per 7/16/99 conv w/ B. S. Riddell

Notes:

1. Air permit application processing by the Bay Area Air Quality Management District (BAAQMD) often takes 2-3 months, and may take longer since 3 schools are located within 1,000 feet of the site.

2. Water discharge permit processing takes the East Bay Municipal Utility District approximately 8 weeks and we are awaiting Fund pre-approval of cost estimate before proceeding.

3. Electrical service will require a transformer upgrade and will take an estimated 8-12 weeks.

Cambria apologizes for any undue delay in implementing corrective action at this site. Please recognize that the UST Cleanup Fund pre-approval process has contributed to some delays on this project. To help expedite system installation, Cambria re-prioritized project tasks during the first quarter of 1999. Rather than completing the design package first, Cambria began conducting the long lead-time items such as air and water discharge permitting and electrical transformer upgrading. With this approach we can complete the design package, select contractors, procure equipment, and install the system while we await permit processing and the PG&E transformer upgrade. This schedule also provides for several months of system operation while water elevations are lowest, thereby allowing aggressive remediation of subsurface hydrocarbons before winter rains commence. A draft schematic of the DPE remediation system is shown on Figures 1 and 2.

CLOSING

Cambria plans to submit the system design and installation bid package to you by July 2, 1999. Upon bid package completion, Cambria will help you solicit bids and forward vendor information to the Cleanup Fund for pre-approval.

Please complete the attached *Cost Pre-Approval Request Form* and forward it along with our cost estimates and the Alameda County Health Care Services (ACHCS) letter to your contact at the UST Cleanup Fund. Upon receiving your authorization, Cambria will commence the interim measures and the water discharge permitting and electrical service coordination.

Cambria appreciates this opportunity to provide you with our services. If you have any questions or comments, please call me at (510) 420-3303.

Sincerely,
Cambria Environmental Technology, Inc.

Bob Clark-Riddell

Bob Clark-Riddell, PE
Principal Engineer

Figures: 1 - DPE Remediation System Layout
2 - Proposed Dual Phase Vacuum Extraction System Layout

Attachment: A - Cost Estimates for Fund Pre-approval

cc: Julie Rose, Randick & O'Dea, 1800 Harrison, Suite 2350, Oakland, CA 94612

bcc: Barney Chan, Alameda County Department of Environmental Health,
UST Local Oversight Program, 1131 Harbor Bay Parkway, 2nd Floor, Alameda, CA 94502

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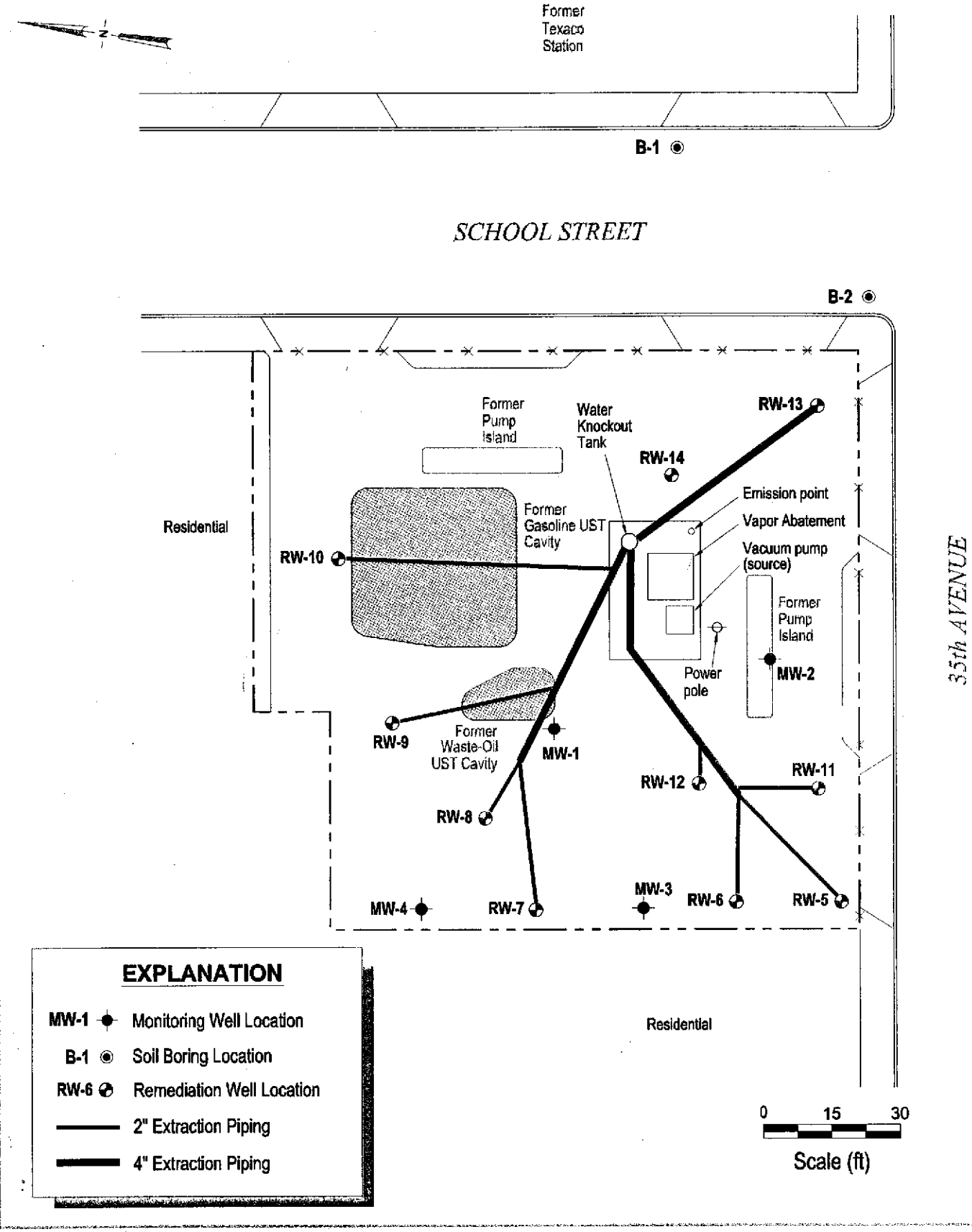

FIGURE
1

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Former Exxon Station

3055 35th Avenue

Oakland, California

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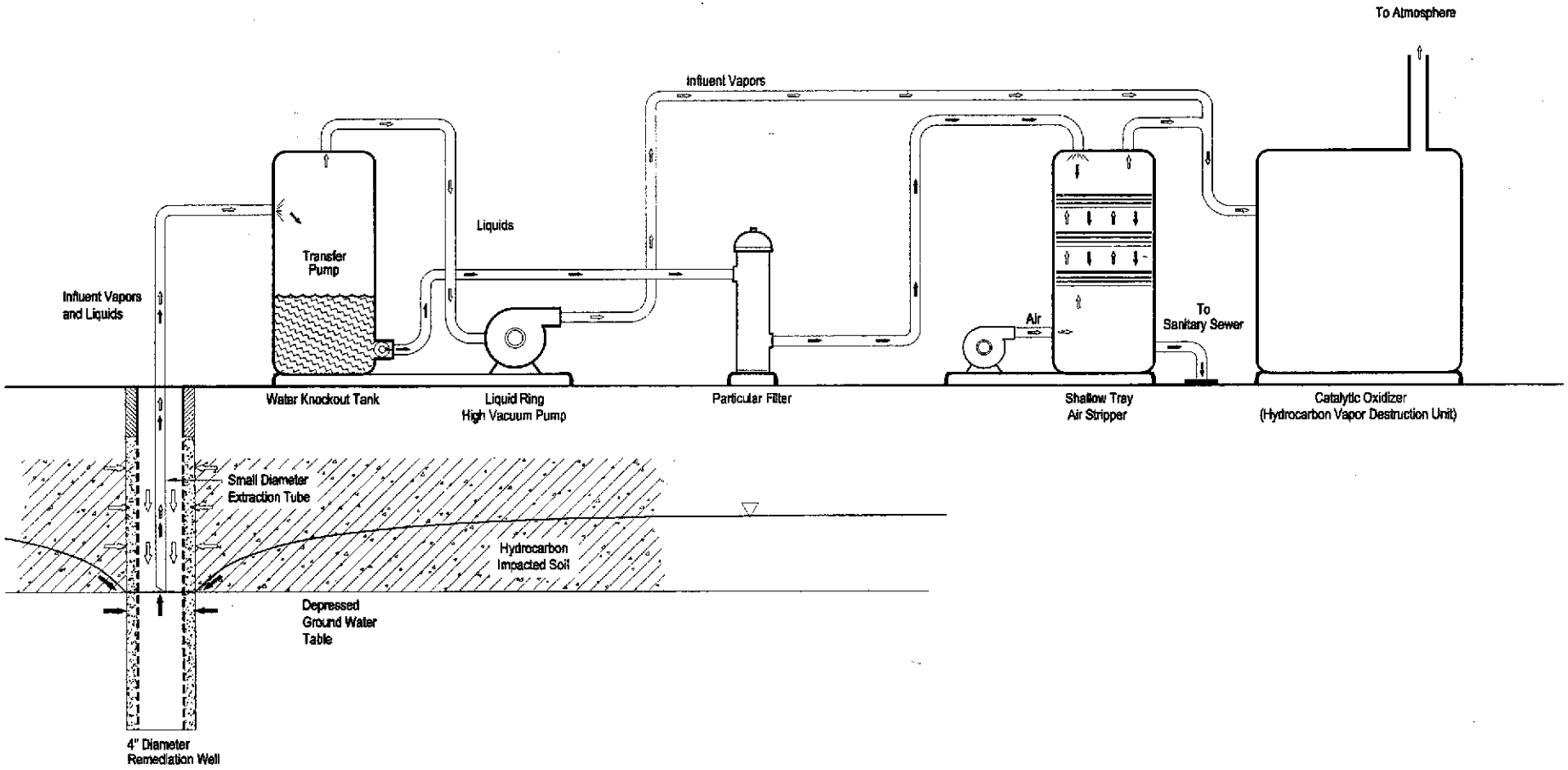
Remediation System Layout



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Environmental Technology, Inc.

Former Exxon Service Station
3055 35th Avenue
Oakland, California

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Proposed Dual Phase Vacuum Extraction System Layout

FIGURE
2

03/21/98