



October 15, 1992

102.01.003

Ravi Arulanantham, Ph. D.
Alameda County Health Agency
Division of Hazardous Materials
Department of Environmental Health
80 Swan Way, Rm. 200
Oakland, California 94621

Work plan Not approved. Need more information. See attached inspection form.

*Ravi
10/19/92*

**TRANSMITTAL
WORKPLAN FOR AND
GROUNDWATER INVESTIGATION
DUBLIN ROCK AND READY MIX
6393 SCARLETT COURT
DUBLIN, CALIFORNIA**

Dear Ravi:

Transmitted herewith is the proposed scope of work for a Phase II soil and groundwater investigation at Dublin Rock and Ready Mix (the Site). As you may or may not be aware, Mr. Michael Dolan is participating in the State Water Resources Control Board (SWRCB) Underground Storage Tank Cleanup Fund program. Participation in the SWRCB program requires written notice of concurrence by the local oversight agency with results of PES' investigation conducted in 1991 and with objectives and methods for the proposed investigation described in the enclosed workplan.

We trust that you received a copy of our report of January 31, 1992. If you did not, please contact us so that we may provide you with that report. We look forward to receiving notice of your concurrence at your earliest convenience. If you have any questions, please call either of the undersigned.

Yours very truly,

PES ENVIRONMENTAL, INC.

Daniel E. Trumbly
Daniel E. Trumbly
Senior Staff Geologist

Michael D. Thompson
Michael D. Thompson, P.E.
Senior Engineer

102.01.003.05

Enclosure: Workplan
10201009.W51



August 26, 1992

102.01.002

Dolan Rental Company
6365 Scarlett Court
Dublin, California 94568

Attention: Mr. Michael Dolan

**PROPOSAL
PHASE II SOIL AND GROUNDWATER INVESTIGATION
DUBLIN ROCK AND READY MIX
DUBLIN, CALIFORNIA**

Dear Mr. Dolan:

This letter presents PES Environmental Inc.'s (PES) proposal to perform a soil and groundwater investigation at Dublin Rock and Ready Mix located at 6393 Scarlett Court in Dublin, California. The purpose of the investigation is to further evaluate the extent of petroleum hydrocarbons in soil and groundwater previously identified at the site.

BACKGROUND

PES performed an investigation at the site in 1991 to evaluate the presence of petroleum hydrocarbons in soil and groundwater near the former location of a 500-gallon underground gasoline tank that reportedly was removed in 1990. Based on the results of our investigation, petroleum hydrocarbons quantified as gasoline were identified in soil and groundwater samples collected from Boring/Monitoring Well MW-2 and in a groundwater sample collected from Monitoring Well MW-3. Monitoring Wells MW-2 and MW-3 were located east and south of the former underground tank location, respectively. Petroleum hydrocarbons were not found in samples collected from wells north and southeast of the former underground tank location (Monitoring Wells MW-1 and MW-4, respectively). Groundwater at the site appears to flow in a southerly direction.

PES prepared a January 31, 1992 report titled *Soil and Groundwater Investigation, Dublin Rock and Ready Mix Facility, 6393 Scarlett Court, Dublin, California* that presented the results of our previous soil and groundwater investigation at the site. The January 31, 1992 report also included a summary of an investigative and remedial approach for addressing environmental concerns associated with the former underground tank. The approach presented was intended to be consistent with the State Water Resources Control Board's (SWRCB) Underground Storage Tank Cleanup Fund program. We understand that you are participating in the SWRCB's Underground Storage Tank Cleanup Fund program.

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The SWRCB's program separates investigative and remedial activities into four phases which consist of: Phase I, Initial Identification; Phase II, Site Characterization and Remedial Planning; Phase III, Remediation; Phase IV, Monitoring. Currently, investigative and remedial activities at the site are in the Site Characterization and Remedial Planning phase. As discussed in our previous report dated January 31, 1992, the extent of soil and groundwater contamination needs to be better defined prior to developing a remediation plan for the site. This Proposal includes additional characterization work required to further evaluate the extent of onsite soil and groundwater contamination. If the contamination does not extend off-site, the data obtained during this investigation should be sufficient to prepare conceptual remedial plans. Alternatively, if the contamination is found to extend offsite, additional site characterization work will be necessary. The tasks to be performed for this phase of the site characterization investigation include the following:

- Task 1 - Groundwater Monitoring of Existing Wells;
- Task 2 - Soil and Groundwater Field Investigation; and
- Task 3 - Report Preparation.

Descriptions of these tasks are presented below.

SCOPE OF WORK

Task 1 - Groundwater Monitoring of Existing Wells

PES will collect groundwater samples from wells installed during our previous investigation at the site. Sampling will include measurement for free product and water level prior to purging the well. All sampling water will be contained on site in 55-gallon steel drums until proper disposal is arranged.

The following quality control (QC) procedures will be followed during the collection of groundwater samples:

- All sampling equipment will be decontaminated by steam cleaning and/or washing with phosphate-free soap and rinsing with distilled water.
- All groundwater samples will be placed in appropriate containers, preserved, and analyzed within the appropriate holding times;
- All samples will be appropriately labeled and submitted to the laboratory accompanied by chain-of-custody documentation; and

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- Laboratory QC will be performed pursuant to the procedures inherent with the specific methods used for analyses, including:
 - One laboratory blank will be analyzed for volatile constituents;
 - All analyses will be performed by a laboratory certified by the State of California for each method of analysis used during the project; and
 - All analyses will be performed using the approved methods described in the RWQCB's Tri-Regional guidelines.

A State-certified laboratory will be retained to analyze the samples in accordance with the Tri-Regional guidelines. The samples will be analyzed for total petroleum hydrocarbons as gasoline (TPHg) following EPA Test Methods 5030/Modified 8015 and benzene, toluene, ethylbenzene, and total xylenes (BTEX) following EPA Test Methods 5030/8020.

Task 2 - Soil and Groundwater Investigation

Appropriate Alameda County Water District boring permits will be obtained prior to drilling. PES will retain a utility locator service and clear the proposed boring locations for utilities. After utility clearance, PES will drill eight to nine borings for collecting soil and groundwater samples. The borings will be positioned to include four in or adjacent to the former underground tank location, two or three in the east of Monitoring Well MW-2, one along the southern property line, and one along the western property line. Details associated with soil and groundwater sampling and chemical analysis are presented below.

Soil Sampling

The borings will be drilled using a solid or hollow-stem auger drilling rig to a depth of about 5 feet below the first encountered groundwater. The depth to groundwater will be measured in the existing monitoring wells before the borings are drilled. Samples will also be collected at changes in lithology, immediately above the groundwater surface, and at the bottom of the boring by driving brass or stainless steel lined split-spoon samplers into the undisturbed soil beneath the cutting bit of the augers. Each sample will be lithologically logged by a PES hydrogeologist or engineer and will be screened with a portable organic vapor analyzer. Based on the results of the screening and/or visual observations, one or two soil samples from each boring will be analyzed for TPHg following EPA Test Methods 5030/Modified 8015 and BTEX following EPA Test Methods 5030/8020.

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Field and laboratory QC procedures for the soil borings include the following:

- All sampling equipment will be decontaminated by steam cleaning and/or washing with phosphate-free soap and rinsing with distilled water;
- All soil samples will be covered with teflon tape, capped, sealed with silicon adhesive tape, and stored on ice in a cooler until delivery to the laboratory;
- All soil sample holding times and analyses will be pursuant to the Tri-Regional guidelines;
- All samples will be appropriately labeled and submitted to the laboratory accompanied by chain-of-custody documentation;
- All lithologic logs will be reviewed by a registered geologist or professional engineer;
- Laboratory QC will be performed pursuant to the procedures inherent with the specific methods used for analyses;
- All analyses will be performed by a laboratory certified by the State of California for each method of analysis used during the project;
- All analyses will be performed using the approved methods described in the Tri-Regional guidelines; and
- All cuttings generated during drilling will be stored in 55-gallon drums on site until laboratory analysis is completed and proper disposal is arranged.

Groundwater Sampling

Groundwater samples will be collected from each boring by: (1) inserting well casing into the borings, (2) purging one casing volume of groundwater, and (3) collecting samples for chemical analysis. The well casing will consist of 2-diameter flush-threaded PVC pipe and well screen. All sampling water will be contained on site in 55-gallon steel drums until proper disposal is arranged. After the groundwater samples are collected, the borings will be grouted to the surface using a cement/bentonite slurry.

The following quality control (QC) procedures will be followed during the collection of groundwater samples:

- All sampling equipment will be decontaminated by steam cleaning and/or washing with phosphate-free soap and rinsing with distilled water;

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- All groundwater samples will be placed in appropriate containers, preserved, and analyzed within the appropriate holding times;
- All samples will be appropriately labeled and submitted to the laboratory accompanied by chain-of-custody documentation; and
- Laboratory QC will be performed pursuant to the procedures inherent with the specific methods used for analyses, including:
 - One laboratory blank will be analyzed for volatile constituents;
 - All analyses will be performed by a laboratory certified by the State of California for each method of analysis used during the project; and
 - All analyses will be performed using the approved methods described in the RWQCB's Tri-Regional guidelines.

A State-certified laboratory will be retained to analyze the samples in accordance with the Tri-Regional guidelines. The samples will be analyzed for TPHg and BTEX following EPA Test Methods previously described.

Task 3 - Report Preparation

The results of the investigation will be presented in a letter report. The report will include site background, field investigative methods used, investigative results, and recommendations for the next round of site activities. After your review and with your approval, the reports will be submitted to the Alameda County Health Agency (ACHA).

FEE ESTIMATE AND SCHEDULE

PES will perform the scope of service on a time and expense basis. Our estimated fee for conducting the Scope of Work is provided on the attached table. If the fee estimate and schedule are acceptable, please sign and return one copy of the attached Contract Addendums as our authorization to proceed.

PES will proceed with the scope of services upon receiving written authorization to proceed. Field activities will be performed within two weeks of obtaining the ACHA's approval to perform the investigation. Samples will be analyzed using a normal (one to two weeks) turnaround time. Upon receipt of the laboratory reports, PES will prepare a draft report for

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your review and comments within two weeks. PES will then finalize the report within one week after receiving your comments. If this schedule is not acceptable, please let us know so that we can accommodate your needs.

We appreciate the opportunity to be of continued assistance to you on this project and we trust that this is the information you need at this time. If you have any questions or require additional information, please call.

Yours very truly,

PES ENVIRONMENTAL, INC.

Michael D. Thompson

Michael D. Thompson, P.E.
Senior Engineer

William F. Frizzell

William F. Frizzell, P.E.
Principal Engineer

Attachments: Addendum 1