



BP OIL

BP Oil Company
16400 Southcenter Parkway, Suite 301
Tukwila, Washington 98188
(206) 575-4077

00 APR 12 2 10 PM '93

April 8, 1993

Ms. ~~Susan Hugo~~ *Eva Chu*
Division of Hazardous Materials
80 Swan Way, Room 350
Oakland, CA 94621

RE: BP OIL FACILITY # 11120
6400 Dublin Blvd.
Dublin, CA

Dear Ms. Hugo:

Please find attached our proposed work plan for the second phase of site characterization of the above named site.

If you have any questions or comments regarding the proposed course of action, I can be contacted at my office (206) 394-5239 after April 12th, 1993.

Yours Faithfully,

Pauline Reith
Environmental Professional
PR:jc WP11120

cc: Mr. David Dalke, California Regional Water Quality Control Board, San Francisco Bay Region, 2101 Webster Street, Suite 500, Oakland, CA

Site file

July 1993

March 25, 1993

Ms. Pauline E. Reith
BP Oil Company
Southcenter Place Building
16400 Southcenter Parkway, Suite 301
Tukwila, WA 98188

Re: BP Service Station No. 11120
6400 Dublin Boulevard, Dublin, California

Dear Ms. Reith,

The purpose of this letter is to provide you with an update of the status of the environmental project at this location, as well as to present a brief workplan for proposed additional investigative activities. Copies of this letter should be distributed to the agencies noted.

Status

A Phase 1 Environmental Investigation was completed in October 1992. The results of this effort were presented in the Hydro-Environmental Technologies Preliminary Site Assessment Report dated January 7, 1993. As presented in the report, concentrations of petroleum hydrocarbons were detected in soil samples collected from borings B-3 and B-4, and in the groundwater from two of four monitoring wells installed. In order to evaluate the distribution/concentration of the hydrocarbons detected in these borings, BP is currently preparing to commence with the second phase of site characterization. The findings will be documented in a brief investigative report, and will be presented such that County and State requirements for quarterly sampling and data presentation are satisfied. Specific activities associated with this effort are proposed in the following section.

Workplan for Additional Assessment

Permit and install three on-site monitoring wells as shown on the attached site plan. Continuously sample a separate boring (upgradient of the UST area) from 10 to 30 feet below grade in order to evaluate subsurface stratigraphy. The purpose of this work is to determine the lateral extent of hydrocarbons in soil and ground water on site.

The additional ground water monitoring wells are proposed to complement the four wells completed during the last phase of assessment. The continuously sampled boring will be drilled first to determine the exact nature of the confined water bearing zone. The boring will be grouted back to ground surface as per regulations. Proposed well MW-6 will be completed as a 4-inch diameter well in

order to enable the completion of an aquifer test at a later date (the other wells will be constructed of 2-inch diameter materials). A step-drawdown test will be completed during well development to provide data to be used during the aquifer test planning stages. All wells will be surveyed, sampled, and monitored.

Soil sampling during the drilling will be carried out in a manner similar to that used during the first stage of the investigation. Soil samples will be collected at 5 foot intervals from grade. Ground water is expected to be encountered at approximately 15 feet below grade. Soil and ground water samples will be analyzed for concentrations of contaminants detected during preliminary site assessment (TPHg, TPHd, and BTEX). The results of this phase of site assessment will be presented in a brief report. This report will also serve to satisfy quarterly monitoring requirements. A comprehensive Problem Assessment Report drafted in accordance with local and State standards will be prepared following complete characterization of the site.

Methodologies to be employed during this phase of site assessment will be executed in accordance with Protocols attached to the Preliminary Site Assessment Report. Permit applications for the installation of the proposed wells are currently in preparation.

If you have any questions or comments regarding the proposed course of action, please do not hesitate to contact me. A copy of this letter workplan should be forwarded to the following agencies:

California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612
attn. Mr. David Dalke

Alameda County Health Agency
Division of Hazardous Materials
80 Swan Way, Room 350
Oakland, California 94621
attn. Ms. Susan Hugo

Very truly yours,
HYDRO-ENVIRONMENTAL TECHNOLOGIES, INC.



Markus B. Niebanck, R. G.
Western Regional Manager

GROUND WATER SAMPLES COLLECTED ON 10/27/92

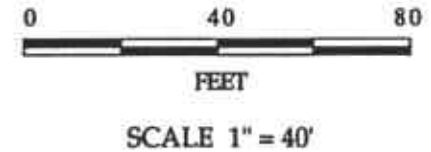
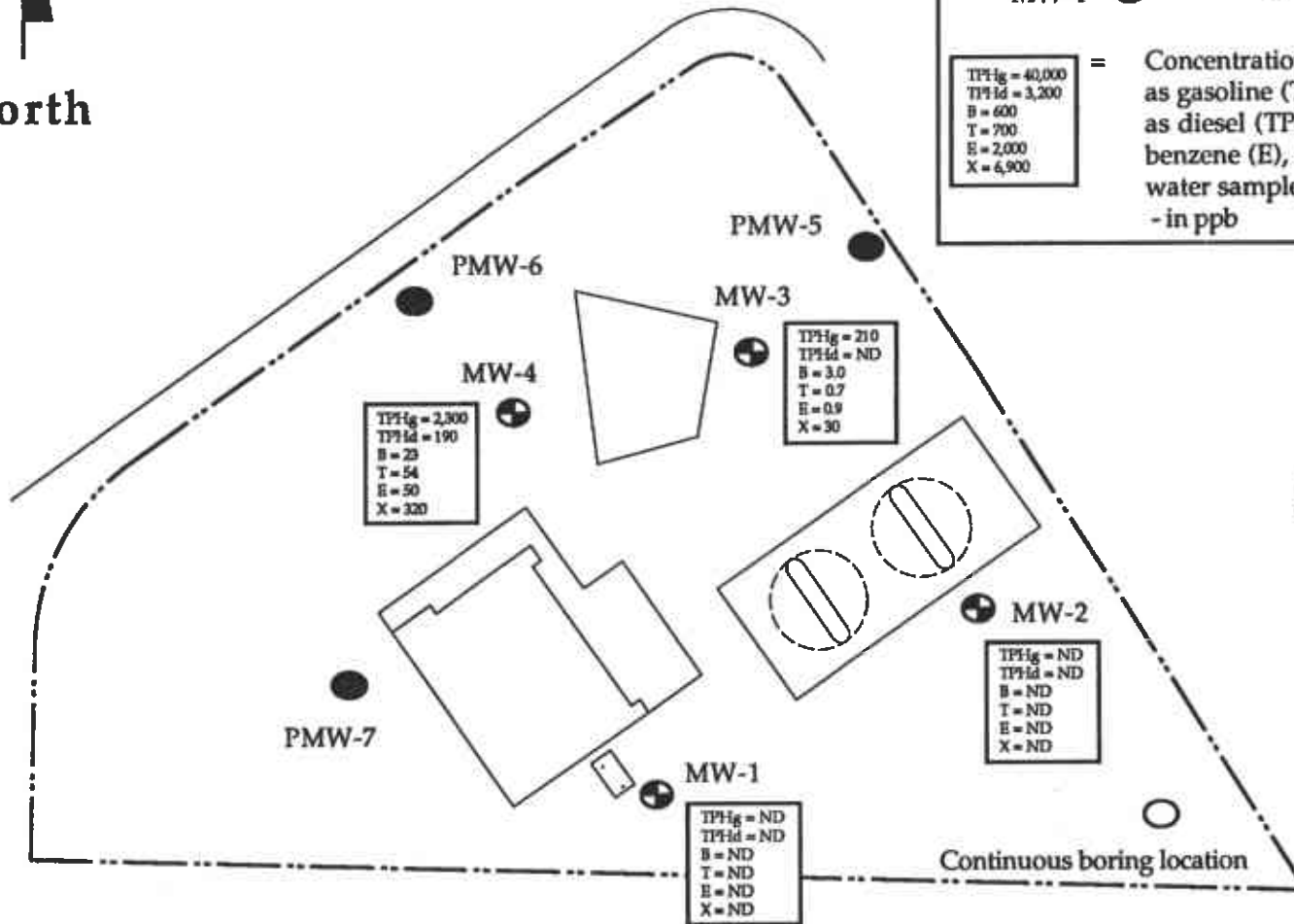
North

EXPLANATION

- PMW-4 ● = Proposed Monitoring well
- MW-1 ⊕ = Monitoring well

| |
|---------------|
| TPHg = 40,000 |
| TPHd = 3,200 |
| B = 600 |
| T = 700 |
| E = 2,000 |
| X = 6,900 |

 = Concentrations of: total petroleum hydrocarbons as gasoline (TPHg), total petroleum hydrocarbons as diesel (TPHd), benzene (B), toluene (T), ethylbenzene (E), and total xylenes (X) dissolved in water samples collected from monitoring well - in ppb



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PROPOSED WELL LOCATION MAP

BP Service Station No. 11120
6400 Dublin Boulevard
Dublin, California

Job No.
9-040
Figure
1

Table 1

SOIL SAMPLES
SUMMARY OF ANALYTICAL RESULTS

BP Service Station No. 11120
6400 Dublin Boulevard
Dublin, California

| Sample Description | TPHg (ppm) | TPHd (ppm) | B (ppm) | T (ppm) | E (ppm) | X (ppm) | HVO (ppm) | TOG (ppm) |
|--------------------|------------|------------|---------|---------|---------|---------|------------|-----------|
| B-1-5.5' | ND | ND | ND | ND | ND | ND | ND | ND |
| B-1-10.5' | ND | ND | ND | ND | ND | ND | ND | ND |
| B-2-5.5' | ND | ND | ND | ND | ND | ND | ND | ND |
| B-2-10.5' | ND | ND | ND | ND | ND | ND | ND | ND |
| B-3-5.5' | 10 | ND | 0.069 | 0.58 | 0.23 | 1.8 | ND | ND |
| B-3-10.5' | 22 | ND | 0.043 | 0.26 | 0.41 | 1.8 | ND | ND |
| B-4-5.5' | 350 | 140 | 0.80 | 7.9 | 5.8 | 31 | ND | 380 |
| B-4-10.5' | 2.9 | 7.9 | 0.030 | 0.11 | 0.10 | 0.44 | ND | 63 |
| MDL | 1 | 5 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005-0.02 | 50 |

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 8015

TPHd = Total petroleum hydrocarbons as diesel by EPA Method 8015

B = Benzene

T = Toluene

E = Ethylbenzene

X = Total Xylenes

BTEX by EPA Method 8020

HVO = Halogenated volatile organics by EPA Method 8010

TOG = Total oil and grease by Standard Method 5520

NT = Not tested

ND = Not detected in concentrations exceeding laboratory method detection limits

MDL = Laboratory method detection limits for all analyses where results are ND

Table 2

**GROUND WATER SAMPLES
SUMMARY OF ANALYTICAL RESULTS**

BP Service Station No. 11120
6400 Dublin Boulevard
Dublin, California

| Sample Description | TPHg (ppb) | TPHd (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | HVO (ppb) | TOG (ppb) |
|--------------------|------------|------------|---------|---------|---------|---------|-----------|-----------|
| MW-1 | ND | ND | ND | ND | ND | ND | ND | ND |
| MW-2 | ND | ND | ND | ND | ND | ND | NT | NT |
| MW-3 | 210 | ND | 3.0 | 0.7 | 0.9 | 30 | NT | NT |
| MW-4 | 2,300 | 190 | 23 | 54 | 50 | 320 | NT | NT |
| MDL | 50 | 50 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5-2.0 | 5,000 |

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 8015

TPHd = Total petroleum hydrocarbons as diesel by EPA Method 8015

B = Benzene

T = Toluene

E = Ethylbenzene

X = Total Xylenes

BTEX by EPA Method 8020

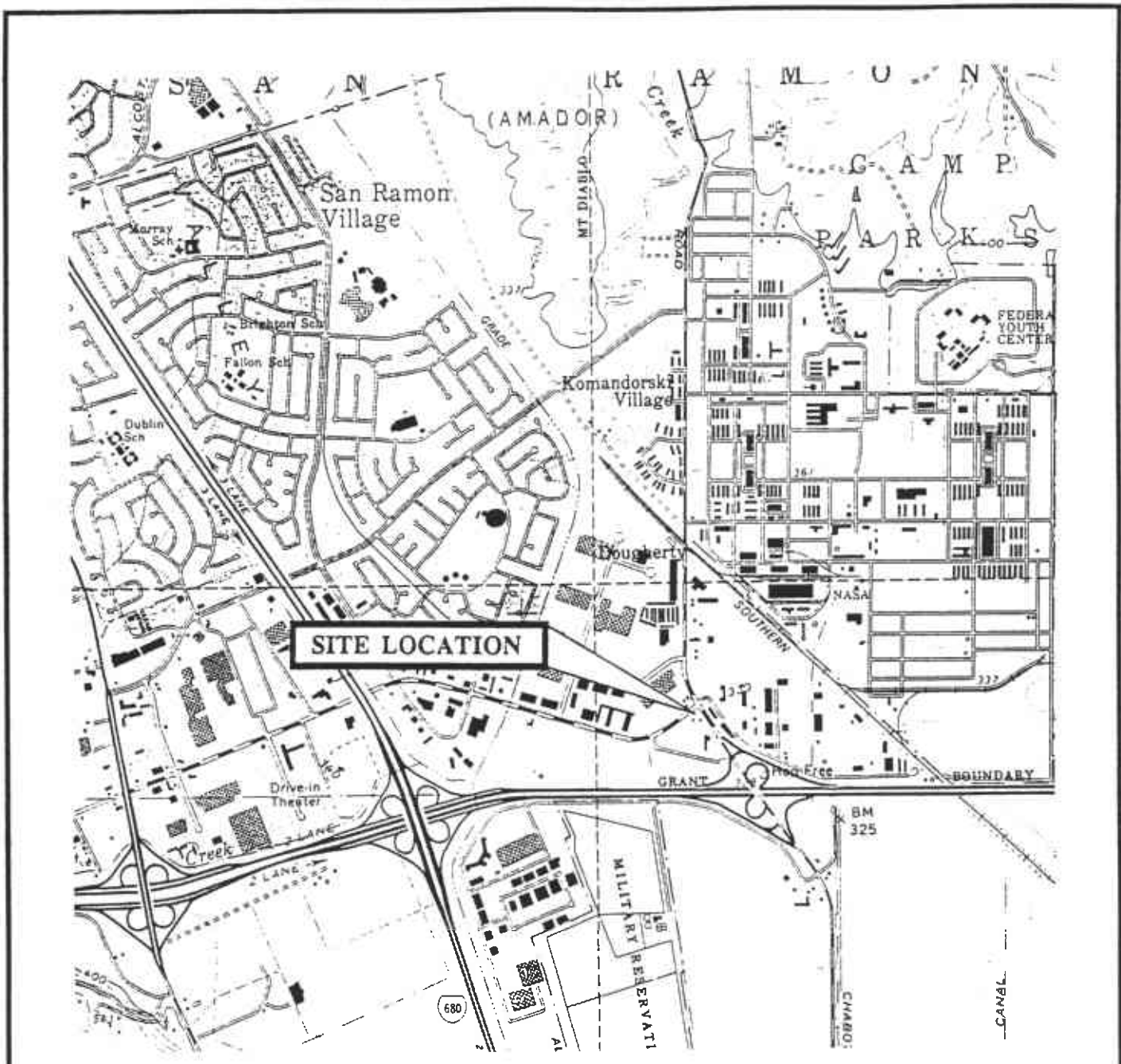
HVO = Halogenated volatile organics by EPA Method 8010

TOG = Total oil and grease by Standard Method 5520

NT = Not tested

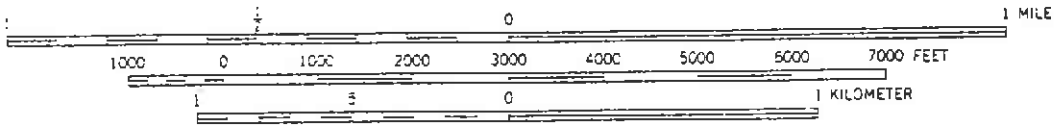
ND = Not detected in concentrations exceeding laboratory method detection limits

MDL = Laboratory method detection limits for all analyses where results are ND



SOURCE:
 USGS QUADRANGLE, 7.5 MINUTE SERIES
 ENTITLED "DUBLIN, CA"
 SCALE 1: 24 000

North



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Site Location Map
 BP Service Station No. 11120
 6400 Dublin Boulevard
 Dublin, California

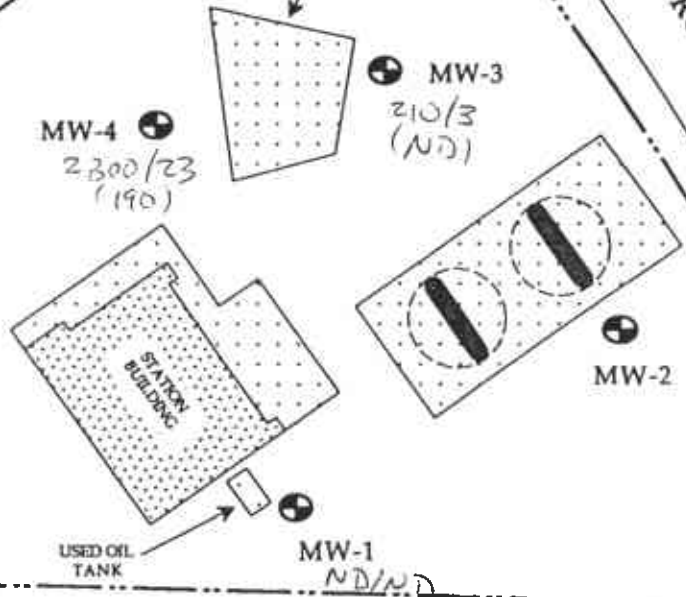
Job No.
 9-040
 Figure
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DUBLIN BOULEVARD

DOUGHERTY ROAD

UNDERGROUND STORAGE TANKS



EXPLANATION

- MW-1 = Monitoring Well
- = Pump Island
- = Canopy
- = Concrete Pad
- = Property Boundary

SCALE 1" = 40'



*Jobs TPH-G/Benzene
(TPH-D)*

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SITE PLAN

BP Service Station No. 11120
6400 Dublin Boulevard
Dublin, California

Job No.
9-040
Figure
2