



BP OIL

BP Oil Company
Environmental Resources Management
Building 13, Suite N
295 SW 41st Street
Renton, Washington 98055-4931
(206) 251-0667

November 22, 1994

Alameda County Health Care Services Agency
Attention Barney M. Chan - Hazardous Materials Specialist
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502-6577

RE: BP Oil Site No. 11109
4280 Foothill Boulevard
Oakland, CA
StID #102

ALISTO
HAZMAT
54 NOV 29 PM 2:38

Dear Mr. Chan:

This letter responds to your letter dated September 28, 1994, and follows-up a phone message that I left on your voice mail this morning. You will recall that the following three documents were requested in your letter: 1) a process flow diagram of the extraction system and a map showing the location and components of the system; 2) a report determining the area of influence of each extraction well; and, 3) a report detailing the amount of gasoline/dissolved product being removed.

Attached please find figures showing the layout of the system and a process flow diagram. I have high-lighted the recovery wells for your convenience.

We will show the effects of the remediation system in the gradient maps shown in our quarterly groundwater monitoring reports. You should note that the pumping water levels have not been shown in previous reports because the data was not collected. The technicians charged with obtaining this information have been concerned that water level indicators may become trapped by the pump column and associated wiring. To remedy this condition, small-diameter PVC "drop tubes" have been placed in the recovery wells. This has enabled water level data to be collected and incorporated into the monitoring reports. I expect that it will be necessary to track the gradual deepening and expansion of the cone(s) of depression formed by pumping the groundwater recovery wells over time to render a conclusion regarding the area(s) of influence created by the remediation system. I expect that you will receive the next quarterly groundwater monitoring report within the next four weeks.

Alisto Engineering Group has been instructed to copy you on quarterly sewer discharge reports so that you will know how much dissolved product/gasoline has been recovered. By copy of this letter to Mr. Beaver at Alisto, I am requesting that you be provided with copies of previous sewer discharge reports also.

I trust that this response adequately addresses all of the concerns that were raised in your letter. Please give me a call at your earliest convenience should you wish to discuss this matter further. My direct dial extension is (206) 251-0689.

Sincerely,



Scott T. Hooton

Environmental Resources Management

attachment

cc: site file
Peter Beaver - Alisto

Santon Sliver
CHURCH

PROPOSED GROUNDWATER TREATMENT COMPOUND

SAMPLING LOCATION FOR TREATED EFFLUENT DISCHARGE

UNDERGROUND USED OIL TANK

TO 551

SERVICE STATION BUILDING

MW-6 (ND<50)

UNDERGROUND FUEL TANKS

PLANTER

MW-9 (ND<50)

CL OF ROADWAY

HIGH STREET

FREMONT HIGH SCHOOL

MW-7 (900)

PLANTER

RESIDENTIAL

MW-2 (ND<50)

PROPOSED TRENCHING

DISPENSER ISLANDS

PROPOSED TRENCHING

MW-3 (820)

PLANTER

MW-4 (150)

PLANTER

MW-5 (SHEEN)

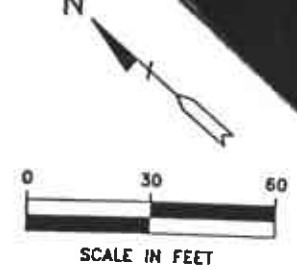
FOOTHILL BLVD

CL OF ROADWAY

MW-8 (ND<50)

CHEVRON SERVICE STATION

SHELL SERVICE STATION



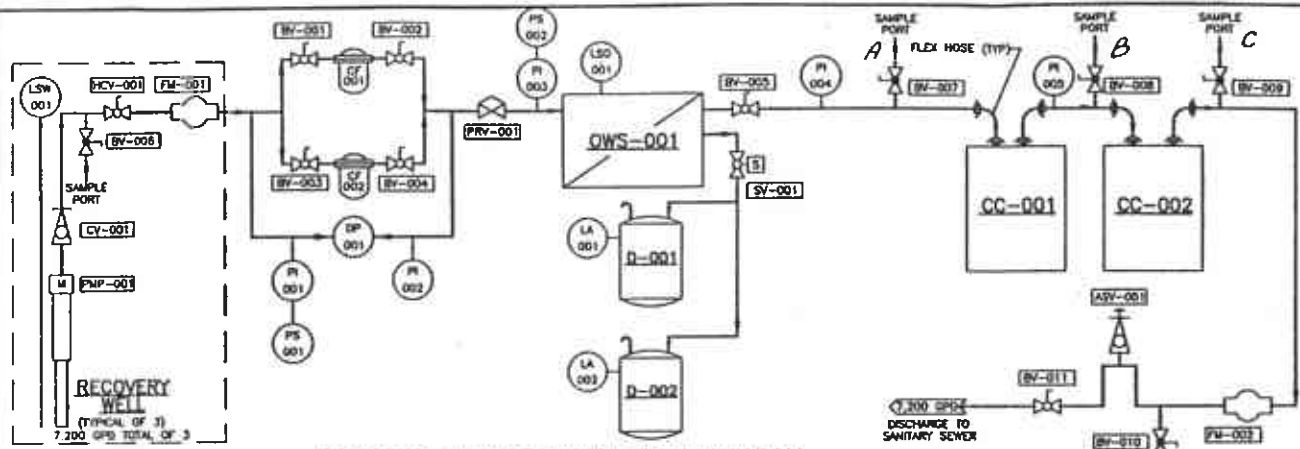
LEGEND:

- GROUNDWATER MONITORING WELL
- 150 TOTAL PETROLEUM HYDROCARBONS AS GASOLINE CONCENTRATION IN PARTS PER BILLION
- 100 TOTAL PETROLEUM HYDROCARBON AS GASOLINE ISOCONCENTRATION CONTOUR IN PARTS PER BILLION
- 0.09 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE
- PROPOSED RECOVERY WELL

FIGURE 1
 BUILDING LAYOUT PLAN
 TOTAL PETROLEUM HYDROCARBONS AS GASOLINE ISOCONCENTRATION MAP (DECEMBER 31, 1992)
 BP OIL SERVICE STATION NO. 11109
 4280 FOOTHILL BOULEVARD
 OAKLAND, CALIFORNIA
 PROJECT NO. 10-005

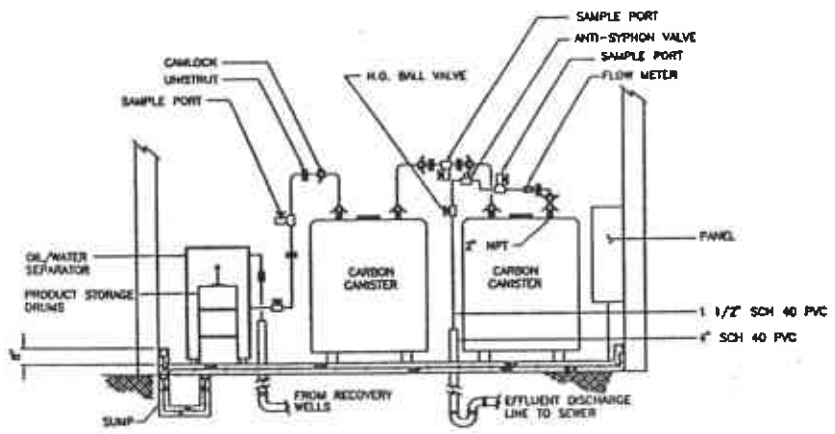
ALISTO ENGINEERING GROUP
 WALNUT CREEK, CALIFORNIA

Accnt No. 502-77421



PROCESS & INSTRUMENTATION DIAGRAM
N.T.S.

EQUIPMENT LIST		
ITEM	DESCRIPTION	SPECIFICATION
CC-001 CC-002	ACTIVATED CARBON CANISTER	1000 LB. CAPACITY, INTERIOR AND EXTERIOR COATED STEEL VESSEL, 12 PSI MAX., ROTARY MOUNTING
PMP-001 PMP-002 PMP-003	SUBMERSIBLE PUMP	1/3 HP, 3/4" DIA, 18, 3 WIRE/GROUND, MALTENANCE CENTRIFUGAL, 3 GPM, 150 FT HEAD
CF-001 CF-002	CATRIDGE FILTER	1 INCH NPT PORT, BRASS BODY, 2" STEEL HOUSING, 20" FULL DEPTH CARTRIDGE
FM-001 (3) FM-002	FLOW METER	3/8" & 3/4" INCH BRASS BODY, HYDROCARBON TOLERANT INTERNAL, POSITIVE DISPLACEMENT, NON-RESEALABLE TUBULAR
HCV-001 (2)	BALL VALVE	3/4" INCH FULL PORT, BRASS, TEFLON SEALS
BV-003 BV-004 BV-005 BV-010 BV-011	BALL VALVE	1-1/2" INCH FULL PORT, PVC, WITH SEALS
BV-006 BV-007 BV-008 BV-009	SAMPLE PORT	1/4" INCH BRASS BALL VALVE
ASV-001	ANTI-SIPHON VALVE	3/4" INCH BRASS, 8" FILTER
CV-001 (3)	CHECK VALVE	3/4" INCH BRASS, BALL OPER, FULL PORT
PI-001 PI-002 PI-003 PI-004 PI-005	PRESSURE GAUGE	1/4" INCH NPT, 0-30 PSI, 2" INCH DIA.
DP-001	DIFFERENTIAL PRESSURE SWITCH	BRASS WETTED PARTS, 5" STL DIAPHRAGM, 0-30 PS RANGE, NEAR 4" HOUSING
LSW-001 (3)	LEVEL CONTROL	RF-TYPE, 4 PORT, CLASS I & II ENCLOSURE, TEFLON COATED WIRE PROBE, FULL DEPTH OF WELL
LSO-001 LA-001 LA-002	LEVEL SWITCH	CAPACITANCE TYPE, STAINLESS STEEL PROBE, SPST SWITCH
CAMLOCK (8 PAIRS)	CAMLOCK	1-1/2" INCH BRASS HOSE BARE NPT
D-001 D-002	PRODUCT STORAGE DRUM	DOUBLE COMPANED, 30 GALLON, STEEL
OWS-001	DR. / WATER SEPARATOR	4 IN 8 MEDIA, COALESCING, PRESSURIZED VESSEL
SV-001	SOLENOID VALVE	1/2" NPT, 8, BRASS, 120V SOLENOID, EXPLOSION PROOF
PRV-001	PRESSURE REDUCING VALVE	BRASS WETTED PARTS, 5" STL DIAPHRAGM, 0-30 PS RANGE, NEAR 4" HOUSING
PS-001 PS-002	PRESSURE SWITCH	1/4" INCH, 0-30 PS BRASS WETTED PARTS, 5" STL DIAPHRAGM, 0-30 PS RANGE, NEAR 4" HOUSING



LAYOUT

P & I D LEGEND

- NORMALLY OPEN BALL VALVE
- NORMALLY CLOSED BALL VALVE
- NORMALLY OPEN SOLENOID VALVE
- PRESSURE REDUCING VALVE
- BALL CHECK VALVE
- ANTI-SIPHON VALVE
- FLOW METER
- CAMLOCK, MALE/FEMALE CONNECTION

ALUSTO ENGINEERING GROUP
CONCORD, CALIFORNIA

DATE: 4-28-82
BY: [Signature]
CHECKED: [Signature]
SCALE: AS NOTED

FIGURE 2 - PROCESS FLOW DIAGRAM
WASTEWATER DISCHARGE PERMIT APPLICATION
BP OIL COMPANY

BP OIL SERVICE STATION NO. 11109
4280 FOOTHILL BOULEVARD
OAKLAND, CALIFORNIA

DATE: 4-28-82
SCALE: AS NOTED
SHEET NO: 2 OF 2

ACCIDENT NO. 002-1194