

JUN 23 1989

LF

RO 887

CHEM HILL TRANSMITTAL

QUALITY CONTROL BOARD

TO California Regional Water
Quality Control Board
1111 Jackson St., Room 6000
Oakland, CA 94607

FROM Jeff Heagle
6425 Christie Ave.
Ste 500
Emeryville, CA 94608

ATTN
RE Longview Fibre, Oakland

DATE 06-22-89
PROJECT NUMBER SFO24103, CI

WE ARE SENDING YOU

- ATTACHED
- UNDER SEPARATE COVER VIA _____
- SHOP DRAWINGS
- DOCUMENTS
- TRACINGS
- PRINTS
- SPECIFICATIONS
- CATALOGS
- COPY OF LETTER
- _____

QUANTITY	DESCRIPTION
1	Letter re: Groundwater Monitoring at the Oakland, California Facility

IF MATERIAL RECEIVED IS NOT AS LISTED, PLEASE NOTIFY US AT ONCE

REMARKS For your information.

COPY TO _____

Existing
Co-01



June 21, 1989

SFO24103.C1

Site address?

Mr. David N. Mendenhall
Water Quality Engineer
Longview Fibre Company
P.O. Box 639
Longview, Washington 98632

8511 Blaine St

Dear David:

Subject: Groundwater Monitoring at the
Oakland, California Facility

The following table summarizes the results of the continuing groundwater monitoring program at Longview Fibre Company's Oakland, California facility. The monitoring well is located at the former site of the four underground diesel storage tanks that were removed in January of 1988.

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<u>Parameter</u> <u>(Analytical Method)</u>	<u>Concentration</u> <u>05-09-88</u> <u>(ug/l)</u>	<u>Concentration</u> <u>05-09-89</u> <u>(ug/l)</u>	<u>Concentration</u> <u>05-12-89</u> <u>(ug/l)</u>
Volatile Aromatics (EPA Method 602/8020 or CAD LUFT)			
Benzene	<1.0	<1.0	<1
Toluene	<1.0	<1.0	<1
Ethyl benzene	<1.0	<1.0	<1
Xylene (Total Isomers)	<1.0	<1.0	<1
Chlorobenzene	<1.0	<1.0	
1,4-Dichlorobenzene	<1.0	<1.0	
1,3-Dichlorobenzene	<1.0	<1.0	
1,2-Dichlorobenzene	<1.0	<1.0	
Tertbutylmethylether	NA	<1.0	
Total Aromatics			<1
Total Petroleum			
Hydrocarbons-Diesel	NA	<50	<50
Free Fuel Product	None	None	None
Thickness On Water	Visible	Visible	Visible
Table			

ug/l = Micrograms Per Liter.

NA = Not Analyzed


NOTE:

A "<" sign indicate that the compound was not detected in the sample. The numbers shown correspond to the method detection limit.

Attached for your information is a detailed description of the field procedures for the May sampling, as well as copies of the laboratory reports and chain-of-custody form. A complete copy of this report has been sent directly to Worth Cornelius in Oakland, the Regional Water Quality Control Board, and the Alameda County Environmental Health Department.

Mr. David N. Mendenhall
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Should you have any questions regarding this report, please contact either Jack Payne at 503/224-9190 or me at 415/652-2426.

Sincerely, 
Jeff Heglie, Hydrogeologist
Project Manager

SF028/005A.WP
Enclosure

cc: Worth Cornelius, Longview Fibre Co., Oakland Facility

Jack Payne, CH2M HILL/PDX

California Regional Water Quality Control Board, San
Francisco Bay Region

Ariu Levi, Alameda County Division of Hazardous
Materials, Environmental Health Department

Attachment
SAMPLING AND ANALYSIS PROCEDURES

INTRODUCTION

After the removal of four underground fuel storage tanks from the Longview Fibre Company's Oakland facility, CH2M HILL recommended that a monitoring well be installed and soil and water samples be collected and analyzed in accordance with guidelines issued by the California Regional Water Quality Control Board (RWQCB). A description of the field activities and a discussion of the results of the soil sampling and initial groundwater investigation are presented in CH2M HILL's July 1988 report "Monitoring Well Installation and Sampling, Longview Fibre Company, Oakland, California Facility." CH2M HILL's February 1988 report entitled "Report on the Removal of Underground Storage Tanks and Sump Closure, Longview Fibre Company, Oakland, California Facility" contains details of the underground storage tank removal and associated soil sampling.

BACKGROUND

Following removal of four underground diesel storage tanks from a portion of Longview Fibre's Oakland facility, CH2M HILL developed a remedial action plan and submitted it to the Alameda County Department of Environmental Health. The plan called for the installation of a down-gradient monitoring well and the collection and analysis of groundwater samples for volatile organic aromatics (EPA Method 602) and soil samples for total petroleum hydrocarbons-diesel (TPH-Diesel) (CH2M HILL, 1988).

The subsequent May 1988 site investigation included the following field activities: installation and development of one shallow monitoring well, collection and analysis of one soil sample from the borehole during monitoring well construction and one sample of the drill cuttings, measurement of fuel product thickness in the well, and the collection and analysis of one groundwater sample after purging the well.

Results of the initial soil and groundwater analyses of May 1988 indicated that there were no detectable concentrations of volatile aromatic hydrocarbons in the groundwater in the immediate vicinity of the former diesel storage tanks, and less than 10 ppm of diesel fuel hydrocarbons in the soils. Quarterly groundwater sampling and analysis for volatile organic aromatics (EPA Method 602) and diesel (TPH-Diesel) was recommended to confirm the initial results.

FIELD METHODS

The quarterly monitoring program consists of measuring the fuel product thickness in the well, if any, and collecting and analyzing one groundwater sample after purging the well. The methods that have been followed are described in the following paragraphs.

EQUIPMENT DECONTAMINATION AND WASTE STORAGE

Prior to sampling, the teflon bailer and associated teflon spigot were washed with a detergent and water solution, rinsed in tap water, spray-rinsed with isopropanol, and rinsed with distilled water. The clear bailer and electric well sounder (for groundwater measurements), and the bailer and suction hose (for well development) were washed with the detergent and water solution and rinsed in tap water.

All groundwater produced during sampling was stored next to the well in barrels with lids secured by bolt rings.

SAMPLE PRESERVATION AND CHAIN-OF-CUSTODY PROCEDURES

Once filled, sample containers were labelled, sealed in a zip lock plastic bags, secured with custody seals, and placed in an ice-filled cooler. Chain-of-custody forms were generated for each shipment of samples, enclosed in zip lock plastic bags, and packed inside the cooler with the samples. A copy of the most recent chain-of-custody form is attached to this letter. Custody seals were affixed to the front and rear of the cooler's lid before shipment to the laboratory via an express courier service.

GROUNDWATER SAMPLING

Before collecting the groundwater sample on May 12, 1989, measurements were made of the water level and petroleum product thickness in the monitoring well. The water level was measured to the nearest 0.01 inches with an electric well sounder, and the product thickness was measured using a clear acrylic bailer.

Standing water was purged from the well by using a hand-powered suction pump and a plastic hose. Approximately 14 gallons (equal to about five casing volumes) were removed from the well. After purging the well, a water sample was collected with a teflon bailer for analysis for volatile organic aromatics (EPA Method 602) and total petroleum hydrocarbons-diesel (TPH-Diesel). Before filling the sample bottles, the initial three bailers full of water removed from the well were discarded in order to further rinse the teflon bailer. Three 40 milliliter VOA sample bottles and one 2.5-liter bottle were filled from the subsequent bailer fulls of water. The VOA bottles were carefully filled to

prevent any air bubbles from remaining in the container after sealing. All discarded groundwater was poured into the barrels containing well development water.

The water sample was analyzed for volatile organic compounds (DHS LUFT Method) and total petroleum hydrocarbons-diesel (TPH-Diesel) in accordance with and guidelines issued by the California Department of Health Services. Analytical services for the water samples were provided by the CH2M HILL laboratory in Redding, California. Copies of the laboratory reports for the most recent sampling are attached to this letter.

SF028/005A.WP

REFERENCES

California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region, 1985. Guidelines for Addressing Fuel Leaks, September.

CH2M HILL, 1988. Report on the Removal of Underground Storage Tanks and Sump Closure, Longview Fibre Company, Oakland, California Facility. Unpublished report prepared for Longview Fibre, February.

CH2M HILL, 1988. Monitoring Well Installation and Sampling, Longview Fibre Company, Oakland, California Facility. Unpublished report prepared for Longview Fibre, July.

CH2M HILL, 1989. Groundwater Monitoring at the Oakland, California Facility. Unpublished letter report of quarterly monitoring prepared for Longview Fibre, April.

SF028/005.WP



Report To: Longview Fibre Monitoring
 CH2M Hill/SFO
 SFO 24103.C1
 Attention: Jeff Heglie/SFO
 Sample Description: Water
 Date of Sample: 5/12/89

Reference Number: 23202
 Page 1 of 1
 Date: 5/25/89
 Phone:
 Sampled By: Client
 Date Received: 5/15/89

TEST	METHOD BLANK	LVF- GW-05	UNITS	DETECTION LIMIT	DATE ANALYZED	METHOD NUMBER
TFH Diesel	<0.05	<0.05	mg/l	0.05	5-19-89	CAL Luft
Benzene	<1	<1	ug/l	1	5-16-89	DHS Luft
Toluene	<1	<1	ug/l	1	5-16-89	DHS Luft
Ethylbenzene	<1	<1	ug/l	1	5-16-89	DHS Luft
Total Xylenes	<1	<1	ug/l	1	5-16-89	DHS Luft
Total Aromatics	<1	<1	ug/l	1	5-16-89	DHS Luft
Bromofluorobenzene *	95	108	%			

Comments: * Surrogate standard in percent recovery.
 mg/l = milligrams per liter.
 ug/l = micrograms per liter.

The information shown on this sheet is test data only and no analysis or interpretation is intended or implied.

Approved By: Bennett J. Tipou

CHAIN OF CUSTODY RECORD

PROJECT NUMBER SFD24103, C1	PROJECT NAME Longview Fibre Monitoring
CLIENT NAME Longview Fibre Company	
REPORT TO JR Heglie / SFO	COPY TO:
REQUESTED COMPLETION DATE Standard turn-around	LABORATORY LRD

ANALYSES REQUESTED

NUMBER OF CONTAINERS 3	BTEX - EPA 602/8020	TPH - Diesel							
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FOR LAB USE ONLY

LAB # _____

PROJ # _____

ACK _____ VERIFIED _____

DATE INVOICED _____

NO. OF SAMPLES _____ pg _____ of _____

DISPOSITION: D R _____ DATE _____

STA NO	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS													
GW	0512	11:35		X	LVF-GW-0589	3	X	X											

REMARKS
VOA Bottles Preserved with HCl (Added by Lab)

SAMPLED BY AND TITLE (SIGNATURE) 1 J. M. de la Hydrologist	DATE/TIME 051289 17:30	RELINQUISHED BY (SIGNATURE) 2	DATE/TIME	RECEIVED BY (SIGNATURE) 3	DATE/TIME
RELINQUISHED BY (SIGNATURE) 4	DATE/TIME	RECEIVED BY (SIGNATURE) 5	DATE/TIME	RELINQUISHED BY (SIGNATURE) 6	DATE/TIME
RECEIVED BY LAB (SIGNATURE) 7	DATE/TIME	SAMPLING PROGRAM SDWA <input type="checkbox"/> NPDES <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER (SPECIFY) _____		SAMPLE SHIPPED VIA <input type="checkbox"/> UPS <input type="checkbox"/> BUS <input checked="" type="checkbox"/> FED-EX <input type="checkbox"/> HAND OTHER _____	
REMARKS _____		AIR BUS BILL NUMBER 3373676224			