

TO: The Plymouth Group
1616 N. Shoreline Blvd
Mountain View, CA 94043

DATE: July 25, 1990
PROJECT NO.: 4454/2

ATTENTION: Laura Rice

SUBJECT: Sunnyside Nursery
Hayward, California

We are: X Enclosing 2 Reports
Forwarding
Per your request
1 ea Number of copies Other

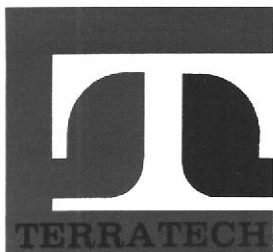
Description: 1) Status of Stockpiled Backfill Soil from January 1990 Diesel Tank Removal, dated July 25, 1990 & 2) Stockpile Soil Sampling, dated March 23, '90

Comments:

Sent by: X First Class Mail
Special Delivery
Other:

CC: Pamela Evans; Alameda County Health Agency
Lester Feldman; California RWQCB
Howard Hatayama; California DHS

Lisa Sousa
Signature of Sender



July 25, 1990
Project 4454/2

Ms. Pamela Evans
Alameda County Health Agency
80 Swan Way, Room 200
Oakland, California 94621

Subject: Status of Stockpiled Backfill Soil from
 January 1990 Diesel Tank Removal
 Sunnyside Nursery
 Hayward, California

Dear Ms. Evans:

Per the July 6, 1990 letter from your agency, we have prepared this letter summarizing the status of the stockpiled soil at the Sunnyside Nursery site in Hayward, California. The subject soil is tank backfill material removed during the January 1990 diesel tank removal work. Our February 26 and March 23, 1990 letter reports describe the work and results of initial characterization testing.

The subject soil was initially spread on a fence-enclosed area of the paved employee parking lot for the Sunnyside Nursery (northeast corner of Laguna Park). During the demolition and site closure work for Laguna Park the soil was moved back across Mohr to Sunnyside's lot at 25048 Mohr Drive (just south of the wholesale flower building).

Two rounds of interim sampling and testing have been performed since the soil has been at 25048 Mohr Avenue; April 18 and July 17, 1990. We understand that the 40± cubic yard stockpile has lain undisturbed during this time period, with the diesel subject only to natural aeration and degradation processes.

All soil samples were collected a minimum of six inches below the exterior surface of the stockpile in clean, two-inch diameter brass liners. The samples were immediately sealed with foil and taped end caps, labeled and iced. The samples were kept iced or refrigerated from the time of collection to the time of testing. Standard chain-of-custody procedures were followed to document sample collection, handling and analysis requests (see attached records).

July 25, 1990

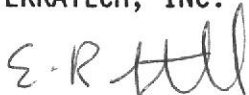
The April 18th evaluation consisted of four discreet samples, composited into one aggregate sample by Anametrix, Inc., a State certified laboratory in San Jose, and analyzed for total petroleum hydrocarbons (TPH) as diesel. The latest evaluation consisted of two discreet samples analyzed by Anametrix for TPH as diesel and the individual fuel constituents - benzene, toluene, ethylbenzene and xylenes (BTEX).

A cumulative summary of the laboratory results for the subject soil is presented in Table 1. The latest results suggest that the TPH levels have declined to near the 100 ppm ceiling for Class III landfill disposal. No detectable BTEX compounds remain. Two additional analyses are planned for the end of August and we are optimistic that they will prove to be the last set needed for landfill acceptance.

If you have any further questions or concerns, please contact us.

Sincerely,

TERRATECH, INC.



Eric R. Lautenbach
CE 42437

Attachments (Table 1, Chain of Custody Records and Laboratory Reports)

cc: Laura Rice, The Plymouth Group
Lester Feldman, California Regional Water Quality Control Board
Howard Hatayama, California Department of Health Services



TABLE 1SUMMARY OF SOIL SAMPLE ANALYSIS RESULTS
FOR STOCKPILE OF DIESEL TANK BACKFILLSunnyside Nursery
Hayward, California

SAMPLE NUMBER	DATE COLLECTED (1990)	TPH as DIESEL (ppm)	BENZENE (ppm)	TOLUENE (ppm)	ETHYL-BENZENE (ppm)	XYLENES (ppm)
S-6a thru 6d (composite)	2/2	200	< 0.050	< 0.050	< 0.050	< 0.050
S-7a thru 7d (composite)	3/8	160	< 0.005	< 0.005	< 0.005	0.007
S-8a thru 8d (composite)	4/18	220	--	--	--	--
S-10	7/17	110	< 0.005	< 0.005	< 0.005	< 0.005
S-11	7/17	87	< 0.005	< 0.005	< 0.005	< 0.005





TERRATECH

CHAIN OF CUSTODY RECORD

P.O. NO. 046B

TURNAROUND: NORMAL

PROJECT NUMBER: <u>4454/2</u>						Number of Containers	Analysis Required								REMARKS	SAMPLE DEPTH
SAMPLERS (signature): <u>T. Morin</u>							TPH - diesel		TPH - gasoline							
Station Number	Date 1990	Time	Comp.	Grab	Station Location											
S-8a	4/18	0700			DIESEL SOIL STOCKPILE	1 BRASS LINER										
S-8b		0710			"	"									COMPOSITE	
S-8c		0720			"	"										
S-8d		0730			"	"										
S-9a	4/18	0735			GASOLINE SOIL STOCKPILE	"										COMPOSITE
S-9b		0745			"	"										
S-9c		0755			"	"										
S-9d		0805			"	"										
Relinquished by(signature):		Date / Time		Received by (signature):		Relinquished by(signature):		Date / Time		Received by (signature):						
Company or Agency:				Company or Agency:		Company or Agency:				Company or Agency:						
Relinquished by(signature):		Date / Time		Received by (signature):		Relinquished by:		Date / Time		Received by (signature):						
Company or Agency:				Company or Agency:		Company or Agency:				Company or Agency:						
Relinquished by(signature):		Date / Time		Received for Laboratory by:		Date / Time		Remarks/Shipping Information								
Thomas C. Morin Company or Agency: TERRATECH, INC.		4/18 16:15		(signature) <i>[Signature]</i>		4-18-90 16:15		Send reports to: Eric Lautenbach 1365 VANDER WAY, SAN JOSE 95112								

ANAMETRIX INC

Environmental & Analytical Chemistry
1961 Concourse Drive, Suite E, San Jose, CA 95131
(408) 432-8192 • Fax (408) 432-8198

TERRATECH**REPORT**

MAY 02 1990

RECFIVED

Eric Lautenbach
Terratech, Inc. - San Jose
1365 Vander Way
San Jose, CA 95112

May 01, 1990
Anamatrix W.O.#: 9004161
Date Received : 04/18/90
Purchase Order#: 0468
Project Number : 4454/2

Dear Mr. Lautenbach:

Your samples have been received for analysis. The REPORT SUMMARY lists your sample identifications and the analytical methods you requested. The following sections are included in this report: RESULTS.

NOTE: Amounts reported are net values, i.e. corrected for method blank contamination.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX, INC.

Sincerely,

ANAMETRIX, INC.


Terry Cooke
TPH Supervisor

TC/dag

REPORT SUMMARY
ANAMETRIX, INC. (408) 432-8192

Client : Terratech, Inc. - San Jose
 Address : 1365 Vander Way
 City : San Jose, CA 95112
 Attn. : Eric Lautenbach

Anamatrix W.O.#: 9004161
 Date Received : 04/18/90
 Purchase Order#: 0468
 Project No. : 4454/2
 Date Released : 05/01/90

Anamatrix I.D.	Sample I.D.	Matrix	Date Sampled	Method	Date Extract	Date Analyzed	Inst I.D.
RESULTS							
9004161-01	S-8(A-D) COMP.	SOIL	04/18/90	TPHd	04/24/90	04/26/90	N/A
9004161-02	S-9(A-D) COMP.	SOIL	04/18/90	TPHg		04/25/90	N/A

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 4454/2 S-8(A-D) COMP.
 Matrix : SOIL
 Date sampled : 04/18/90
 Date anl.TPHg: N/A
 Date ext.TPHd: 04/24/90
 Date anl.TPHd: 04/26/90

Anamatrix I.D. : 9004161-01
 Analyst : IY
 Supervisor : TC
 Date released : 05/01/90
 Date ext. TOG : N/A
 Date anl. TOG : N/A

CAS #	Compound Name	Reporting Limit (ug/kg)	Amount Found (ug/kg)
	TPH as Diesel	10000	220000

- ND - Not detected at or above the practical quantitation limit for the method.
 TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 4454/2 S-9(A-D) COMP.
 Matrix : SOIL
 Date sampled : 04/18/90
 Date anl.TPHg: 04/25/90
 Date ext.TPHd: N/A
 Date anl.TPHd: N/A

Anamatrix I.D. : 9004161-02
 Analyst : TY
 Supervisor : TC
 Date released : 05/01/90
 Date ext. TOG : N/A
 Date anl. TOG : N/A

CAS #	Compound Name	Reporting Limit (ug/kg)	Amount Found (ug/kg)
	TPH as Gasoline	1000	ND

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.



TERRATECH

CHAIN OF CUSTODY RECORD

P.O. NO. 8476

TURNAROUND: 48-HOUR

PROJECT NUMBER: # 4454/2						Number of Containers	Analysis Required										REMARKS	SAMPLE DEPTH					
SAMPLERS (signature): Thomas C. Marin							TPH	DIESEL	BTEX														
Station Number	Date 1990	Time	Comp.	Grab	Station Location																		
S-10	7/17	PM		X	DIESEL SOIL STOCKPILE	1 LINER	X	X													OK		
S-11	7/17	PM		X	DIESEL SOIL STOCKPILE	1 LINER	X	X														↓	
Relinquished by (signature): Company or Agency:		Date / Time		Received by (signature): Company or Agency:		Relinquished by (signature): Company or Agency:		Date / Time		Received by (signature): Company or Agency:													
Relinquished by (signature): Company or Agency:		Date / Time		Received by (signature): Company or Agency:		Relinquished by: Company or Agency:		Date / Time 07-17-90		Received by (signature): Calvin Robinson Company or Agency: ANAMEINX													
Relinquished by (signature): Thomas C. Marin Company or Agency: TERRATECH, INC.		Date / Time 7/17/90 14:40		Received for Laboratory by: (signature)		Date / Time		Remarks/Shipping Information Send reports to: Eric Lautenbach 1365 VANDER WAY, SAN JOSE 95112															

ANAMETRIX INC

Environmental & Analytical Chemistry
1961 Concourse Drive, Suite E, San Jose, CA 95131
(408) 432-8192 • Fax (408) 432-8198



REPORT

Eric Lautenbach
Terratech, Inc. - San Jose
1365 Vander Way
San Jose, CA 95112

July 20, 1990
Anamatrix W.O.#: 9007116
Date Received : 07/17/90
Purchase Order#: 8476

Dear Mr. Lautenbach:

Your samples have been received for analysis. The REPORT SUMMARY lists your sample identifications and the analytical methods you requested. The following sections are included in this report: RESULTS.

NOTE: Amounts reported are net values, i.e. corrected for method blank contamination.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX, INC.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sarah Schoen".

Sarah Schoen, Ph.D.
Laboratory Manager

SRS/dag

REPORT SUMMARY
ANAMETRIX, INC. (408) 432-8192

Client : Terratech, Inc. - San Jose
Address : 1365 Vander Way
City : San Jose, CA 95112
Attn. : Eric Lautenbach

Anamatrix W.O.#: 9007116
Date Received : 07/17/90
Purchase Order#: 8476
Project No. : 4454/2
Date Released : 07/20/90

Anamatrix I.D.	Sample I.D.	Matrix	Date Sampled	Method	Date Extract	Date Analyzed	Inst I.D.
RESULTS							
9007116-01	S-10	SOIL	07/17/90	TPHd	07/17/90	07/19/90	N/A
9007116-02	S-11	SOIL	07/17/90	TPHd	07/17/90	07/19/90	N/A

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 4454/2 S-10
 Matrix : SOIL
 Date sampled : 07/17/90
 Date anl.BTEX: 07/19/90
 Date ext.TPHd: 07/17/90
 Date anl.TPHd: 07/18/90

Anamatrix I.D. : 9007116-01
 Analyst : *cb*
 Supervisor : *DDG*
 Date released : 07/20/90
 Date ext. TOG : N/A
 Date anl. TOG : N/A

CAS #	Compound Name	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
71-43-2	Benzene	0.005	ND
108-88-3	Toluene	0.005	ND
100-41-4	Ethylbenzene	0.005	ND
1330-20-7	Total Xylenes	0.005	ND
	TPH as Diesel	10	110

- ND - Not detected at or above the practical quantitation limit for the method.
 TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.
 BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 4454/2 S-11
 Matrix : SOIL
 Date sampled : 07/17/90
 Date anl.BTEX: 07/19/90
 Date ext.TPHd: 07/17/90
 Date anl.TPHd: 07/18/90

Anamatrix I.D. : 9007116-02
 Analyst : *cy*
 Supervisor : *DLG*
 Date released : 07/20/90
 Date ext. TOG : N/A
 Date anl. TOG : N/A

CAS #	Compound Name	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
71-43-2	Benzene	0.005	ND
108-88-3	Toluene	0.005	ND
100-41-4	Ethylbenzene	0.005	ND
1330-20-7	Total Xylenes	0.005	ND
	TPH as Diesel	10	87

- ND - Not detected at or above the practical quantitation limit for the method.
 TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.
 BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

14:40
14:40



TERRATECH

9007116

2

P.O. NO. 8476

TURNAROUND: 48-HOUR

CHAIN OF CUSTODY RECORD

PROJECT NUMBER: # 4454/2						Number of Containers	Analysis Required							REMARKS	SAMPLE DEPTH
SAMPLERS (signature): Thomas C. Marin							TPH	DIESEL	BTEX						
Station Number	Date 1990	Time	Comp.	Grab	Station Location										
① S-10	07-17-90			X	DIESEL SOIL STOCKPILE	1 LINER	X	X					OK		
② S-11	07-17-90			X	DIESEL SOIL STOCKPILE	1 LINER	X	X							
Relinquished by(signature): Company or Agency:		Date / Time	Received by (signature): Company or Agency:		Relinquished by(signature): Company or Agency:		Date / Time	Received by (signature): Company or Agency:							
Relinquished by(signature): Company or Agency:		Date / Time	Received by (signature): Company or Agency:		Relinquished by: Company or Agency:		Date / Time 07-17-90 2:40	Received by (signature): Company or Agency: Calvin Robinson ANALYTIX							
Relinquished by(signature): Thomas C. Marin TERRATECH, INC.		Date / Time 7/17/90 14:40	Received for Laboratory by: (signature)		Date / Time	Remarks/Shipping Information Send reports to: Eric Lautenbach 1385 VANDER WAY, SAN JOSE 95112									