R02603

RMC PACIFIC MATERIALS

6601 KOLL CENTER PARKWAY
P.O. BOX 5252
PLEASANTON, CALIFORNIA 94566
(925) 426-8787 • fax: (925) 426-2281
www.rmcpacific.com

12/29/2003

Robert Weston
Alameda County
Dept. Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, Ca. 94502-6577

RE: RMC Pacific Materials - Eliot Aggregate Plant
Fuel System Upgrade - Under Dispenser Soil Sampling Results
1544 Stanley Blvd., Pleasanton, CA.

Mr. Weston,

RMC Pacific Materials is submitting the attached report describing the results of a subsurface soil investigation at the above-referenced property. This report is being submitted as part of the SB 989 upgrade requirements to UST fuel systems at facility. The report describes the sampling protocol and results of laboratory analysis on a soil sample taken from directly beneath the gasoline dispenser.

If you have any questions or concerns, please contact me at (925) 426-2261.

Sincerely,

Robert Aldenhuysen
Environmental Supervisor

cc: R. Bier
D. Tsuchida
B. Kelly
J. Robertson
Files

SEVERN TRENT STL

Submission#: 2003-11-0716

RMC Pacific Materials, Inc.

December 01, 2003

P.O. Box 5252
Pleasanton, CA 94566
Attn.: Robert Aldenhuysen
Project: EL10T

Dear Mr. Aldenhuysen,

Attached is our report for your samples received on 11/20/2003 15:01
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 01/04/2004 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.
You can also contact me via email. My email address is: vvancil@stl-inc.com

Sincerely,

Vincent Vancil
Project Manager

SUBSURFACE SOIL INVESTIGATION REPORT
RMC Pacific Materials - Eliot Aggregate Plant
Under Dispenser Fuel System Upgrade
1544 Stanley Blvd., Pleasanton, CA.

INTRODUCTION

This report describes the results of a subsurface soil investigation beneath the gasoline fuel dispenser at the above-referenced site. Analysis of the soil sample by a state certified laboratory indicates that petroleum contamination exists directly beneath the dispenser.

SAMPLING PROTOCOL

In late November 2003 both the gasoline and diesel UST fuel dispensers at the Eliot Aggregate Plant were upgraded with under-dispenser containment sumps to meet the SB 989 requirements. Mr. Robert Weston of the Alameda County Environmental Health Department was present to inspect the upgrade work and the sampling of soil beneath the dispensers.

Sampling under the gasoline dispenser began after approximately eighteen inches of compacted aggregate fill material was removed with a hand shovel. A 2-inch diameter hand auger was then used to dig into the native soil layer. Upon penetrating into the native soil layer the hand auger was removed and a 2-inch drive-sampler containing a clean laboratory supplied 2-inch brass sleeve was inserted into the hole. The sampler was then driven into the soil with a slide hammer until the sampling tube was completely filled with soil. The sampler was then extracted from the hole; the brass sleeve was removed from the sampler and soil sample packed down with latex-gloved hands. The ends of the brass sleeve were then covered with a clean section of plastic sheeting and laboratory provided end caps, leaving no space for volatilization of organic compounds. The sample was promptly labeled and then placed into a chilled ice chest for subsequent laboratory analysis at Severn Trent Laboratory (STL) in Pleasanton. Proper chain-of-custody protocol was maintained at all times. An attempt to sample the soil beneath the diesel dispenser proved unsuccessful due to the thick volume of aggregate fill material underlying that dispenser, making it very difficult to excavate the aggregate without caving in the sidewalls before reaching native soil. After a brief discussion with Mr. Weston it was decided that a sample would not be required due to the small amount of contaminated gravel observed and the sampling conditions. All petroleum contaminated aggregate material removed during the dispenser upgrade and sampling of the two dispenser areas was placed into two sealed 55-gallon drums for later, manifested, off-site disposal (copy of manifest to be supplied at a future date).

Results of Analysis

The soil sample taken from beneath the gasoline dispenser was analyzed by STL for TPH-gasoline, BTEX and MTBE (EPA method 8015M/8021B). Laboratory analyses indicate that petroleum contamination was detected in the soil sample. The concentration of gasoline in the sample was found to be 2,300 mg/Kg. The levels of BTEX were as follows: Benzene - 12 mg/Kg, toluene - 110 mg/Kg, ethyl benzene - 53 mg/Kg, and xylene - 260 mg/Kg. The analysis for MTBE indicated a level of 71 mg/Kg. The results of analysis are presented in Table 1. A copy of the laboratory report and the chain-of-custody are included in Appendix A.

CONCLUSIONS

Based on the laboratory analysis of the soil sample detectable concentration levels of petroleum contamination exist under the site's gasoline dispenser. The fuel upgrade contractor (Reinholdt Engineering Construction) had not reported finding any loose or leaking connections during any of the previous annual inspections or upgrade repairs to the system. RMC contends that this contamination is surficial and that it most likely came from the accumulation of minor fuel spillage running down through small joint cracks in the concrete pad during the filling of site vehicles. RMC knows that the groundwater level under the plant is at approximately 125 feet below surface grade and has therefore not been affected. RMC requests that site clean up be postponed until the UST system is removed in the coming years. For the foreseeable future RMC has instituted new under-dispenser inspection procedures to monitor the system on a routine basis.

Appendix A

Laboratory Results of Analysis

Table 1

Eliot Aggregate Plant

Results of Analysis - Gas/BTEX Compounds

Under Dispenser Soil Sampling

Sample Date	Sample ID	Sample Depth[1]	Gasoline (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl-benzene (mg/Kg)	Xylene (mg/Kg)	MTBE (mg/Kg)
11/20/2003	G-1	3	2300	12	110	53	260	71

Notes:
[1] = feet below surface grade

SEVERN TRENT STL

Submission #: 2003-11-0716

Gas/BTEX Compounds (High Level)

RMC Pacific Materials, Inc.

Attn.: Robert Aldenhuysen

P.O. Box 5252
Pleasanton, CA 94566
Phone: (925) 426-2261 Fax: (925) 426-2231

Project: EL10T

Received: 11/20/2003 15:01

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
G-1	11/20/2003 13:55	Soil	1

Gas/BTEX Compounds (High Level)

RMC Pacific Materials, Inc.

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Project: EL10T

Received: 11/20/2003 15:01

Prep(s):	5030 5030	Test(s):	8015M 8021B
Sample ID:	**G-1**	Lab ID:	2003-11-0716 - 1
Sampled:	11/20/2003 13:55	Extracted:	11/25/2003 14:05
Matrix:	Soil	QC Batch#:	2003/11/25-05.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	2300	100	mg/Kg	10.00	11/25/2003 14:05	
Benzene	12	6.2	mg/Kg	10.00	11/25/2003 14:05	
Toluene	110	6.2	mg/Kg	10.00	11/25/2003 14:05	
Ethyl benzene	53	6.2	mg/Kg	10.00	11/25/2003 14:05	
Xylene(s)	260	6.2	mg/Kg	10.00	11/25/2003 14:05	
MTBE	71	6.2	mg/Kg	10.00	11/25/2003 14:05	
Surrogate(s)						
Trifluorotoluene	NA	53-125	%	1.00	11/25/2003 14:05	sd
4-Bromofluorobenzene-FID	NA	58-124	%	1.00	11/25/2003 14:05	sd

Gas/BTEX Compounds (High Level)

RMC Pacific Materials, Inc.

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Project: EL10T

Received: 11/20/2003 15:01

Batch QC Report

Prep(s): 5030

Test(s): 8015M

Method Blank

Soil

QC Batch # 2003/11/25-05.05

MB: 2003/11/25-05.05-001

Date Extracted: 11/25/2003 10:29

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	10	mg/Kg	11/25/2003 10:29	
Benzene	ND	0.62	mg/Kg	11/25/2003 10:29	
Toluene	ND	0.62	mg/Kg	11/25/2003 10:29	
Ethyl benzene	ND	0.62	mg/Kg	11/25/2003 10:29	
Xylene(s)	ND	0.62	mg/Kg	11/25/2003 10:29	
MTBE	ND	0.62	mg/Kg	11/25/2003 10:29	
Surrogates(s)					
Trifluorotoluene	101.6	53-125	%	11/25/2003 10:29	
4-Bromofluorobenzene-FID	112.4	58-124	%	11/25/2003 10:29	

Gas/BTEX Compounds (High Level)

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Project: EL10T

Received: 11/20/2003 15:01

Batch QC Report

Prep(s): 5030

Test(s): 8021B

Laboratory Control Spike **Soil** **QC Batch # 2003/11/25-05.05**

LCS 2003/11/25-05.05-002 Extracted: 11/25/2003 Analyzed: 11/25/2003 11:01

LCSD 2003/11/25-05.05-003 Extracted: 11/25/2003 Analyzed: 11/25/2003 11:32

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	0.120	0.126	0.125	96.0	100.8	4.9	77-123	35		
Toluene	0.125	0.130	0.125	100.0	104.0	3.9	78-122	35		
Ethyl benzene	0.117	0.124	0.125	93.6	99.2	5.8	70-130	35		
Xylene(s)	0.376	0.395	0.375	100.3	105.3	4.9	75-125	35		
Surrogates(s)										
Trifluorotoluene	543	561	500	108.6	112.2		53-125	0		

Gas/BTEX Compounds (High Level)

RMC Pacific Materials, Inc.

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Project: EL10T

Received: 11/20/2003 15:01

Batch QC Report

Prep(s): 5030

Test(s): 8015M

Laboratory Control Spike **Soil** **QC Batch # 2003/11/25-05.05**

LCS 2003/11/25-05.05-004 Extracted: 11/25/2003 Analyzed: 11/25/2003 09:55

LCSD 2003/11/25-05.05-005 Extracted: 11/25/2003 Analyzed: 11/25/2003 10:27

Compound	Conc.	mg/Kg	Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Gasoline	0.635	0.651	0.625	101.6	104.2	2.5	75-125	35		
Surrogates(s)										
4-Bromofluorobenzene-FID	535	552	500	107.0	110.4		58-124			

Gas/BTEX Compounds (High Level)

RMC Pacific Materials, Inc.

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Phone: (925) 426-2261 Fax: (925) 426-2231

Project: EL10T

Received: 11/20/2003 15:01

Legend and Notes

Result Flag

sd

Surrogate recovery not reportable due to required dilution.

SEVERN TRENT **STL**

STL San Francisco Chain of Custody

1220 Quarry Lane · Pleasanton CA 94566-4756
Phone: (925) 484-1919 · Fax: (925) 484-1096
Email: info@chromalab.com

2003-L0716

Reference #: 80454

Date 11/20/03 Page 1 of 1

Report To

Attn: ROB ALDENHUYSEN
Company: RMC PACIFIC
Address: PO BOX 5252
Phone: (925) 426-2261 Email:
Bill To:
Sampled By:
Attn:
Phone:

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	TPH EPA - ☐ 8015/8021 ☐ 8260B ☒ Gas w/ ☒ BTEX ☒ MTBE	Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other___	Fuel Tests EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxyenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:___	☐ W.E.T (STLC) ☐ TCLP	☐ Hexavalent Chromium ☐ pH (24h hold time for H_2O)	☐ Spec Cond. ☐ Alkalinity ☐ TSS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4					Number of Containers
G-1	11/20/03	1355	SOIL	N/A	X																					1

Project Info.

Project Name: ELIOT
Project#:
PO#:
Credit Card#:

Sample Receipt

of Containers:
Head Space:
Temp: 14.0°C
Conforms to record:

TAT: 5 Day | 72h | 48h | 24h | Other:

Report: ☒ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank Fund EDF
Special Instructions / Comments: ☐ Global ID ____

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 15:01	Signature: Time:	Signature: Time:
Printed Name: ROBERT ALDENHUYSEN Date: 11/20/03	Printed Name: Date:	Printed Name: Date:
Company: RMC PACIFIC MATERIALS	Company:	Company:
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: Time:	Signature: Time:	Signature: Denise Harrington Time:
Printed Name: Date:	Printed Name: Date:	Printed Name: D. Harrington 1501 Date:
Company:	Company:	Company: STL-SF 11/20/03

Rev 07/02

SEVERN TRENT STL

STL San Francisco

Sample Receipt Checklist

Submission #:2003- 11 - 0716

Checklist completed by: (initials) NK Date: 11 / 20 /03

Courier name: ☐ STL San Francisco ☒ Client _____

Custody seals intact on shipping container/samples	Yes____	No____	Not Present ✓
Chain of custody present?	Yes ✓	No____	
Chain of custody signed when relinquished and received?	Yes ✓	No____	
Chain of custody agrees with sample labels?	Yes ✓	No____	
Samples in proper container/bottle?	Yes ✓	No____	
Sample containers intact?	Yes ✓	No____	
Sufficient sample volume for indicated test?	Yes ✓	No____	
All samples received within holding time?	Yes ✓	No____	
Container/Temp Blank temperature in compliance (4^{o} C ± 2)?	Temp: 14.0 °C	Yes ✓	No____
	Ice Present	Yes____	No ✓
Water - VOA vials have zero headspace?	No VOA vials submitted ✓	Yes____	No____

(if bubble is present, refer to approximate bubble size and itemize in comments as **S** (small ~O), **M** (medium ~ O) or **L** (large ~ O)

Water - **pH acceptable upon receipt?** ☐ Yes ☐ No soil

☐ **pH adjusted**– Preservative used: ☐ HNO_3 ☐ HCl ☐ H_2SO_4 ☐ NaOH ☐ ZnOAc –**Lot #(s)** _____

For any item check-listed "No", provided detail of discrepancy in comment section below:

Comments: <4hrs from sampling

Project Management [Routing for instruction of indicated discrepancy(ies)]

Project Manager: (initials) _____ Date: ____/____/03

Client contacted: ☐ Yes ☐ No

Summary of discussion:

Corrective Action (per PM/Client):