

**LODI CITY COUNCIL
SHIRTSLEEVE SESSION
CARNEGIE FORUM, 305 WEST PINE STREET
TUESDAY, APRIL 3, 2012**

A. Roll Call by City Clerk

An Informal Informational Meeting ("Shirtsleeve" Session) of the Lodi City Council was held Tuesday, April 3, 2012, commencing at 7:00 a.m.

Present: Council Member Hansen, Council Member Johnson, Mayor Pro Tempore Nakanishi, and Mayor Mounce

Absent: Council Member Katzakian

Also Present: City Manager Bartlam, City Attorney Schwabauer, and City Clerk Johl

B. Topic(s)

B-1 Receive Update on Treatment and Monitoring Activities for PCE/TCE at Central, Southern, Western, and Northern Plumes (PW)

City Manager Bartlam briefly introduced the subject matter of the PCE cleanup program.

Public Works Director Wally Sandelin provided a PowerPoint presentation regarding the PCE cleanup program. Specific topics of discussion included plume testing and groundwater monitoring, Southern Plume status, Western Plume status, Northern Plume status, Central Plume status, groundwater trends, shallow zone, intermediate zone, deep zone, permanent facilities, and source area treatment.

In response to Mayor Mounce, Mr. Sandelin stated in the Southern Plume the new well is a monitoring well only for sampling purposes.

In response to Council Member Hansen, Mr. Sandelin stated the monitoring will continue until such time as the City is told by the State to discontinue, which will likely be at least a year.

In response to Mayor Mounce, Mr. Sandelin stated the noise factor with monitoring wells is limited to the actual drilling only as the sampling itself does not have noise.

In response to Council Member Hansen, Mr. Sandelin stated the new wells in the Western Plume are costing more because of the level of drilling and depth.

In response to Council Member Johnson, Mr. Sandelin stated clusters are drilled to different depth levels to determine migration patterns.

In response to Council Member Johnson and Mayor Mounce, City Attorney Schwabauer stated there is a shared data agreement, which was a part of the settlement agreement, and staff is having difficulty getting a hold of Luster-Cal's consultant to force sharing of the data.

In response to Council Member Hansen, Mr. Sandelin stated the water level in the Central Plume is 45 to 50.

In response to Mayor Mounce, Mr. Schwabauer confirmed that the wells in the Central Plume across the street from City Hall are vapor and extraction wells and a brief discussion ensued regarding the noise levels associated with the different types of wells.

In response to Mayor Pro Tempore Nakanishi, Mr. Sandelin stated that, with respect to the decision-making process for the location of wells in the City, it is a joint effort by the City and the regional board.

In response to Council Member Hansen, Mr. Sandelin stated he is confident the City will continue to have the resources for the cleanup effort and the challenge lies with convincing the regional board that spot treatments are not efficient and cost effective. Further, Mr. Sandelin stated as PCE migrates to the outside of the City boundaries it goes through a degradation and dissolution process whereby it becomes TCE and then DCE, which exists below the required limits. Mr. Sandelin stated the City has been participating in the DCE monitoring program since 2006.

In response to Council Member Johnson, Mr. Sandelin stated the regional board will likely not remove any deep levels of monitoring until it discontinues all monitoring. Mr. Sandelin stated when monitoring ends in specific locations it is negotiated as compliance is shown.

In response to Mayor Pro Tempore Nakanishi, Mr. Sandelin confirmed the assumption that, even if the City were not involved in PCE/TCE efforts, the City's drinking supply was still safe. Mr. Bartlam stated this assumption is also confirmed by way of monitoring versus action steps. Mr. Schwabauer stated the exact amount of PCE that was originally in the ground is unknown and experts have differing opinions.

In response to Council Member Hansen, Mr. Sandelin stated another groundwater extraction well is being built because the former well design had a shortcoming and another approach is being utilized.

In response to Council Member Johnson, Mr. Sandelin stated the City is spending \$250,000 a year on the Central Plume facility, which is less than originally predicted, and some of the work is being performed by staff while the monitoring is being done by a consultant.

In response to Mayor Pro Tempore Nakanishi, Mr. Sandelin stated the regional board does have local history with PCE at Lincoln Center in Stockton.

In response to Myrna Wetzel, Mr. Bartlam stated the amount of time for degradation and dissolution is unknown as it took 60 years for the water to travel a few blocks.

In response to Ed Miller, Mr. Schwabauer stated PCE in the Central Plume came from a variety of sources including dry cleaners and Lodi News Sentinel although the exact amount for each is uncertain. Settlement in the Central Plume with the various litigants was \$7 million.

Mr. Sandelin conducted a brief tour of the Central Plume facility located behind the Oddfellows Building on Pine Street across from City Hall.

C. Comments by Public on Non-Agenda Items - None

D. Adjournment

No action was taken by the City Council. The meeting was adjourned at 8:05 a.m.

ATTEST:

Randi Johl
City Clerk



**CITY OF LODI
COUNCIL COMMUNICATION**

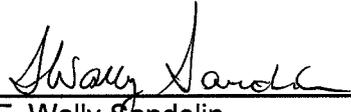
AGENDA TITLE: Receive Update on Treatment and Monitoring Activities for PCE/TCE at Central, Southern, Western and Northern Plumes
MEETING DATE: April 3, 2012 (Shirtsleeve Session)
PREPARED BY: Public Works Director

RECOMMENDED ACTION: Receive update on treatment and monitoring activities for PCE/TCE at Central, Southern, Western and Northern plumes.

BACKGROUND INFORMATION: Information regarding the past four years of studies, treatment, monitoring, and expenditures related to the PCE/TCE operations in the Central, Southern, Western, and Northern plumes will be provided.

Following a half-hour presentation, a site visit to the Central Plume Interim Remedial Measures treatment facilities will be conducted. The facilities are located near the alley between Church, Oak, Pleasant and Pine Streets.

FISCAL IMPACT: Not applicable.
FUNDING AVAILABLE: Not applicable.



F. Wally Sandelin
Public Works Director

FWS/pmf

APPROVED: 

Konradt Bartlam, City Manager

The City of Lodi
**Public Works
Engineering**



PCE Cleanup Program

Shirtsleeve Session

April 3, 2012



PCE Cleanup Program

- Southern Plume Testing and Groundwater Monitoring
- Western Plume Testing and Groundwater Monitoring
- Northern Plume Characterization
- Central Plume Treatment and Groundwater Monitoring



Southern Plume

Two Borings to 200 feet

5 – 6 Grab Samples at Various Depths

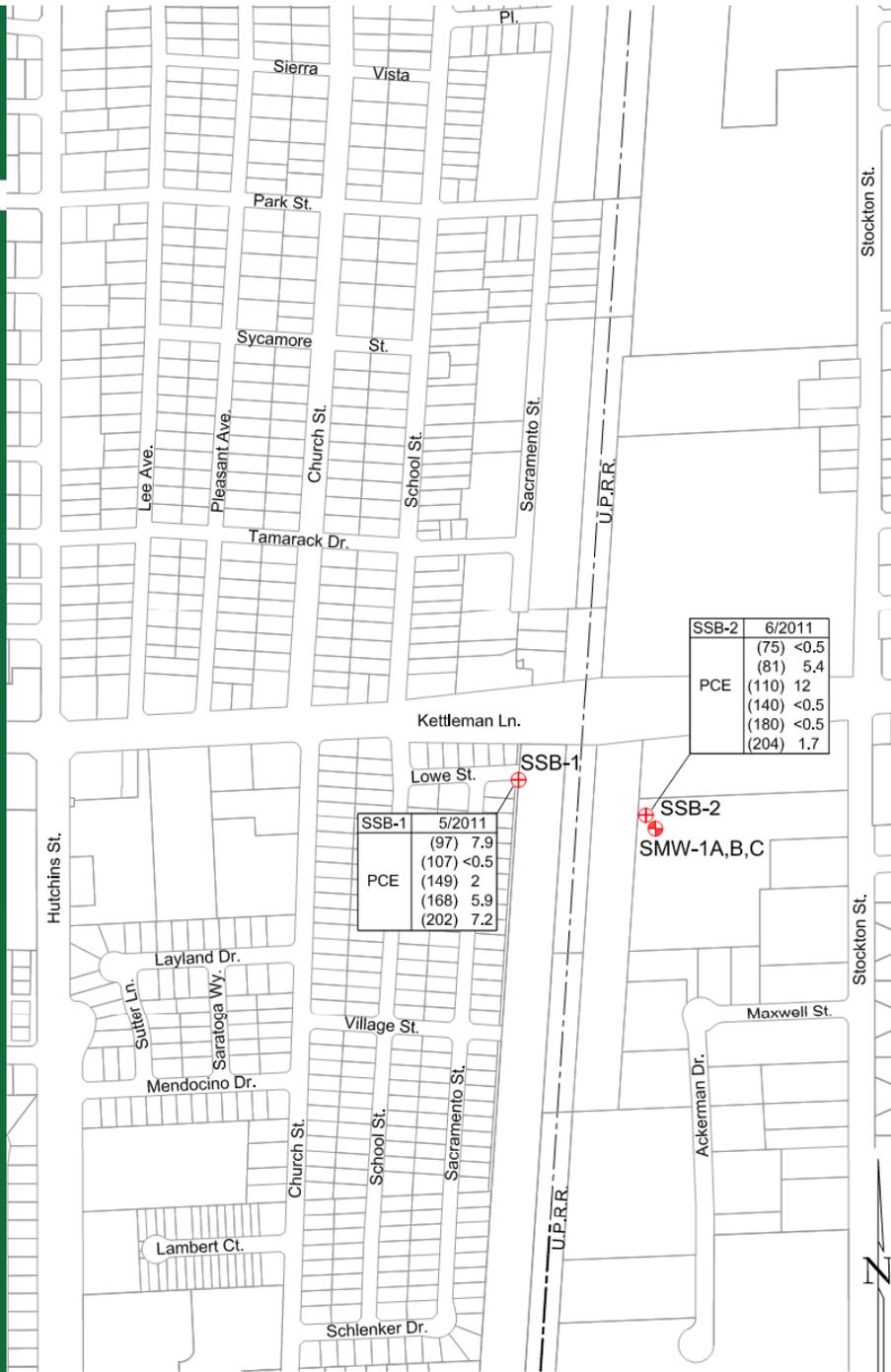
Sample Points to Determine Southern Edge

Regional Board Monitoring Program

Monitor Natural Attenuation



Southern Plume



Southern Plume Area

1" = 300'



Western Plume

Four Borings to 200 feet

5 – 7 Grab Samples at various depths

Sample Points to Characterize East/West Limits

Regional Board Monitoring Program

Monitor Natural Attenuation



Western Plume



Western Plume Area

1" = 400'



Northern Plume

Evaluate Undisclosed Data

Recommend Groundwater Monitoring Plan

Construct Monitoring Wells

Regional Board Monitoring Program

Monitor Natural Attenuation



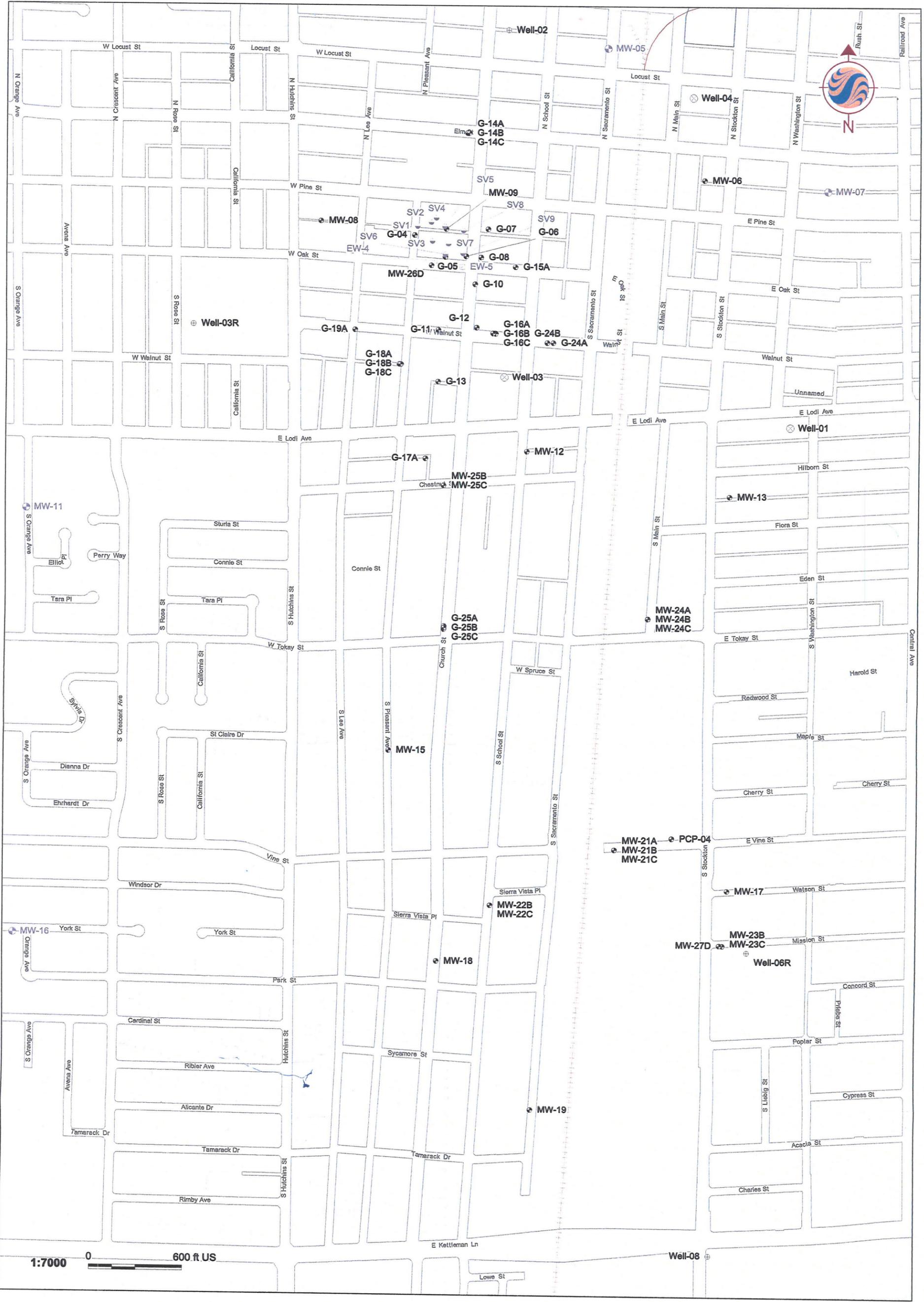
Central Plume Monitoring

Four Monitoring Zones

1. Shallow Zone < 75 feet BGS
2. Intermediate Zone 75 – 125 feet BGS
3. Deep Zone 125 – 150 feet BGS
4. Deeper Zone > 150 feet BGS

BGS = Below Ground Surface

I:\04\04\Work_group\01221\active\122140012_data_base_mgm\mDatabase\185702079 - City of Lodi\drawing\2011 04 Report 201201\Manifest\185702079_2011\04_base.map [Fig 02 (Well Locations) Layout]
 Revised: 1/20/2012 By: asrodriguez



Stantec

Legend

- ⊙ Monitoring Well
- ⊕ Monitoring Well Not Included in Groundwater Monitoring Program
- ⊕ Water Supply Well
- ⊗ Abandoned Water Supply Well
- ⊙ Extraction Well
- ▼ SVE Well
- Road
- ⋯ Railroad
- ▭ Parcel

Notes

1. State Plane California III FIPS 0403 Feet.
2. Base data provided by the City of Lodi, Public Works Department.

Client/Project

City of Lodi, Public Works Department
 Groundwater Monitoring
 Lodi, San Joaquin County, California

Figure No.

2

Title

Well Locations

\\c01004-068\work_group\01221\active\122140012_data_base_mgmt\165702079 - City of Lodi\drawing\2011\04_base_map [Fig 06] [Exceedences Intermediate PCE] Layout
 Revised: 12/20/2012 By: astroszall



G-24B				
	PCE	TCE	c-1,2-DCE	t-1,2-DCE
02/11/2011	4.7	74	< 0.50	< 0.50
04/28/2011	4.6	72	< 0.50	< 0.50
08/23/2011	4.4	73	< 0.50	< 0.50
11/22/2011	4.8	75	< 0.50	< 0.50

G-16B				
	PCE	TCE	c-1,2-DCE	t-1,2-DCE
02/11/2011	1.9	65	< 0.50	< 0.50
04/29/2011	2.3	65	< 0.50	< 0.50
08/23/2011	1.9	52	< 0.50	< 0.50
11/22/2011	1.7	52	< 0.50	< 0.50

MW-25B				
	PCE	TCE	c-1,2-DCE	t-1,2-DCE
02/10/2011	3500	11	4.5	< 0.50
04/28/2011	3300	12	5.1	< 0.50
08/22/2011	4400	12	< 10	< 10
11/21/2011	3600	< 10	< 10	< 10

G-25A				
	PCE	TCE	c-1,2-DCE	t-1,2-DCE
02/10/2011	550	< 2.5	< 2.5	< 2.5
04/28/2011	440	< 2.0	< 2.0	< 2.0
08/22/2011	600	< 2.5	< 2.5	< 2.5
11/21/2011	570	2.2	< 2.0	< 2.0

MW-21B				
	PCE	TCE	c-1,2-DCE	t-1,2-DCE
02/10/2011	71	19	42	< 0.50
04/28/2011	74	20	45	0.52
08/22/2011	66	16	38	< 0.50
11/21/2011	56	16	41	< 0.50

MW-22B				
	PCE	TCE	c-1,2-DCE	t-1,2-DCE
02/10/2011	2	< 0.50	< 0.50	< 0.50
04/28/2011	2.4	< 0.50	< 0.50	< 0.50
08/22/2011	2.2	< 0.50	< 0.50	< 0.50
11/21/2011	1.8	< 0.50	< 0.50	< 0.50

1:7000 0 600 ft US



- Legend**
- ⊕ Monitoring Well
 - ⊕ Water Supply Well
 - ⊕ Extraction Well
 - ⊕ SVE Well
 - Road
 - Railroad
 - PCE Contour
 - ▭ Parcel

Notes

- Base data provided by the City of Lodi, Public Works Department.

MW-12				
	PCE	TCE	c-1,2-DCE	t-1,2-DCE
07/10/2009	9.3	0.63	< 0.50	< 0.50

*Red values indicate that the parameter exceeded the California Primary MCL.

Client/Project
 City of Lodi, Public Works Department
 Groundwater Monitoring
 Lodi, San Joaquin County, California

Figure No.
 6

Title
PCE Isoconcentration Contour Map - Intermediate Zone



Groundwater Trend

- Groundwater Levels Are Seasonal
 - Highest in Spring
 - Lowest in Fall
- Groundwater Levels Lowest 2009
- Slight Recovery Past Two Years



Shallow Zone

Micrograms/liter (parts per billion)

Compliance Point = 5

➤ G - 04 (Source)	9,500 (2001)	32 (2011)
➤ G - 05 (Source)	59,000 (2001)	370 (2011)
➤ G - 13 (Lodi Ave.)	1,400 (2001)	280 (2011)



Intermediate Zone

Micrograms/liter (parts per billion)
Compliance Point = 5

- MW - 25B (Chestnut) 2,300 (2005) 3,600 (2011)
- G – 25A (Tokay) 170 (2003) 570 (2011)
- MW – 21B (Vine) 86 (2005) 56 (2011)



Deep Zone

Micrograms/liter (parts per billion)
Compliance Point = 5

- G – 18B (S/Walnut) < 1 (2003) < 1 (2011)
- G – 25B (Tokay) 12 (2003) 3 (2011)



Permanent Facilities

- 9 Soil Vapor Extraction Wells (SVE)
- 2 Groundwater Extraction Wells (GWE)
- 1 Replacement GWE Well Under Construction
- 2 Granular Activated Carbon Filters (SVE & GWE)



Source Area Treatment

➤ Pilot Facility (SVE)	2009 (1 year)	1,004 pounds
	2010 (1 year)	527 pounds
➤ Permanent (SVE)	2011 (9 mos.)	1,464 pounds
Permanent (GWE)		Minimal
➤ TOTAL	2006 – 2011	8,023 pounds



Questions?