

# **INFORMATION HANDOUT**

**For Contract No. 04-1SS474**

**At 04-CC-680-R10.5/R11.0**

**Identified by**

**Project ID 0412000606**

## **WATER QUALITY**

Water Quality Information Handout

## **MATERIALS INFORMATION**

Excerpts from Preliminary Site Investigation Report

Nonpotable Water Source Information

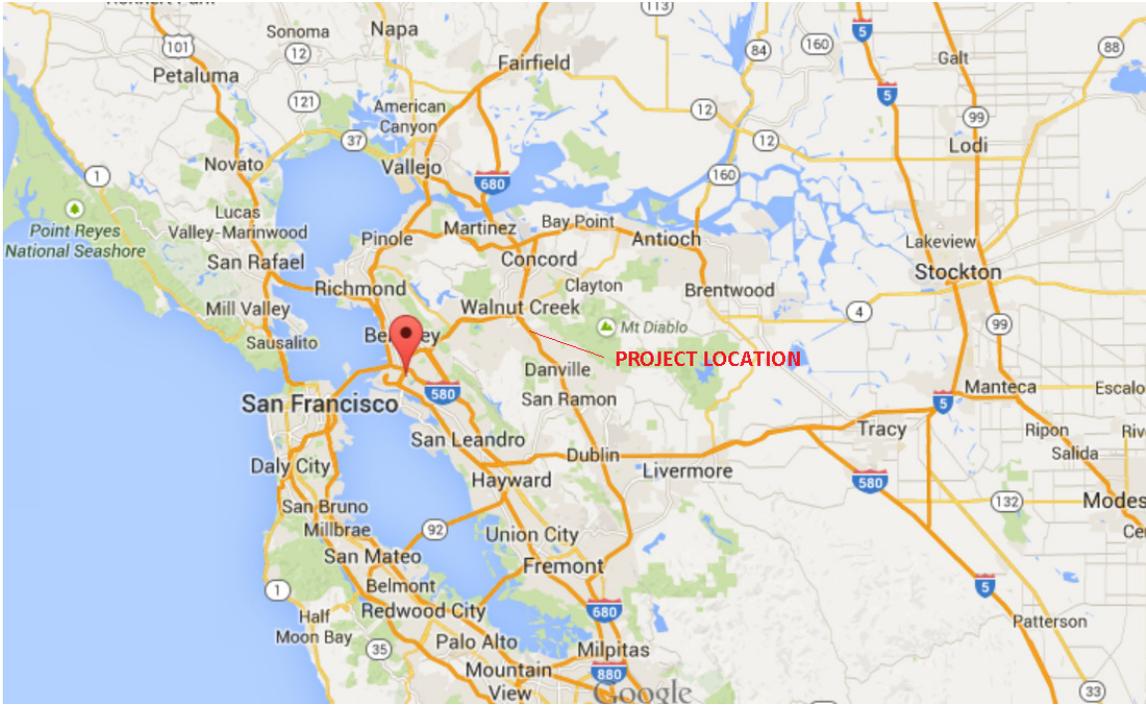
**WATER QUALITY INFORMATION HANDOUT  
CONTRACT NO. 1SS47  
Slide Repair  
04-CC-680\_R10.3/R10.9**

California Department of Transportation  
District 4, 111 Grand Avenue  
Oakland, CA 94612

## **Disclaimer**

A “Disclaimer” is required specifying that the information provided in the Water Quality Information Handout is just a guideline and is to be used for information purposes only and should not be considered a sole source document to adhere to the requirements of the new National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP), Number CAS000002, adopted on September 2, 2009. The contractor is required to provide water quality monitoring, sampling and implement best management practices (BMPs) based on standard industry operations, field conditions and conditions encountered based on the contractor’s means and methods. The information in this handout is not to be construed in any way as a waiver of the provisions in the CGP. Bidders and contractors are cautioned to make independent investigations and examinations as they deem necessary to satisfy the conditions encountered in performance of work, with respect to the following: sampling and monitoring locations, distribution of watershed areas for sizing of BMPs, and selection of BMPs in order to conform to the requirement of the contract documents and the CGP.

## **Project Vicinity**



## **Risk Assessment**

	A	B	C
1	<b>Sediment Risk Factor Worksheet</b>		<b>Entry</b>
2	<b>A) R Factor</b>		
3	Analyses of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy (E) times the maximum 30-min intensity (I30) (Wischmeier and Smith, 1958). The numerical value of R is the average annual sum of EI30 for storm events during a rainfall record of at least 22 years. "Isoerodent" maps were developed based on R values calculated for more than 1000 locations in the Western U.S. Refer to the link below to determine the R factor for the project site.		
4	<a href="http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm">http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm</a>		
5	<b>R Factor Value</b>		4.14
6	<b>B) K Factor (weighted average, by area, for all site soils)</b>		
7	The soil-erodibility factor K represents: (1) susceptibility of soil or surface material to erosion, (2) transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff even though these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high rates and large volumes of runoff. Use Site-specific data must be submitted.		
8	<a href="#">Site-specific K factor guidance</a>		
9	<b>K Factor Value</b>		0.37
10	<b>C) LS Factor (weighted average, by area, for all slopes)</b>		
11	The effect of topography on erosion is accounted for by the LS factor, which combines the effects of a hillslope-length factor, L, and a hillslope-gradient factor, S. Generally speaking, as hillslope length and/or hillslope gradient increase, soil loss increases. As hillslope length increases, total soil loss and soil loss per unit area increase due to the progressive accumulation of runoff in the downslope direction. As the hillslope gradient increases, the velocity and erosivity of runoff increases. Use the LS table located in separate tab of this spreadsheet to determine LS factors. Estimate the weighted LS for the site prior to construction.		
12	<a href="#">LS Table</a>		
13	<b>LS Factor Value</b>		3.78
14			
15	<b>Watershed Erosion Estimate (=R<sub>x</sub>K<sub>x</sub>LS) in tons/acre</b>		5.790204
16	<b>Site Sediment Risk Factor</b>		<b>Low</b>
17	Low Sediment Risk: < 15 tons/acre		
18	Medium Sediment Risk: >=15 and <75 tons/acre		
19	High Sediment Risk: >= 75 tons/acre		
20			

## Receiving Water (RW) Risk Factor Worksheet

Entry

### A. Watershed Characteristics

yes/no

A.1. Does the disturbed area discharge (either directly or indirectly) to a **303(d)-listed waterbody impaired by sediment** (For help with impaired waterbodies please visit the link below) or has a **USEPA approved TMDL implementation plan for sediment**?:

[http://www.waterboards.ca.gov/water\\_issues/programs/tmdl/integrated2010.shtml](http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml)

**OR**

A.2. Does the disturbed area discharge to a waterbody with designated beneficial uses of SPAWN & COLD & MIGRATORY? (For help please review the appropriate Regional Board Basin Plan)

[http://www.waterboards.ca.gov/waterboards\\_map.shtml](http://www.waterboards.ca.gov/waterboards_map.shtml)

**no**

[Region 1 Basin Plan](#)

[Region 2 Basin Plan](#)

[Region 3 Basin Plan](#)

[Region 4 Basin Plan](#)

[Region 5 Basin Plan](#)

[Region 6 Basin Plan](#)

[Region 7 Basin Plan](#)

[Region 8 Basin Plan](#)

[Region 9 Basin Plan](#)

# Combined Risk Level Matrix

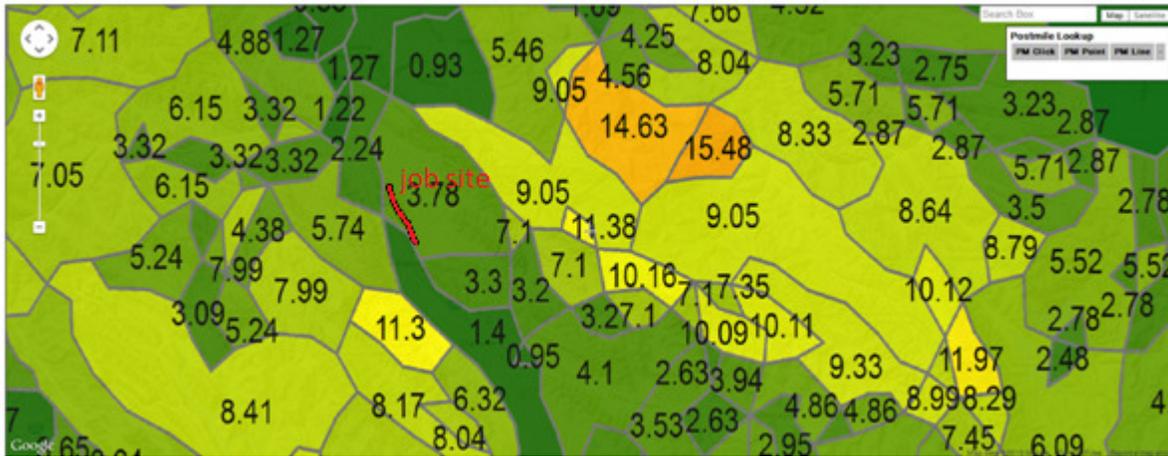
		<u>Sediment Risk</u>		
		Low	Medium	High
<u>Receiving Water Risk</u>	Low	Level 1	Level 2	
	High	Level 2		Level 3

Project Sediment Risk: **Low**

Project RW Risk: **Low**

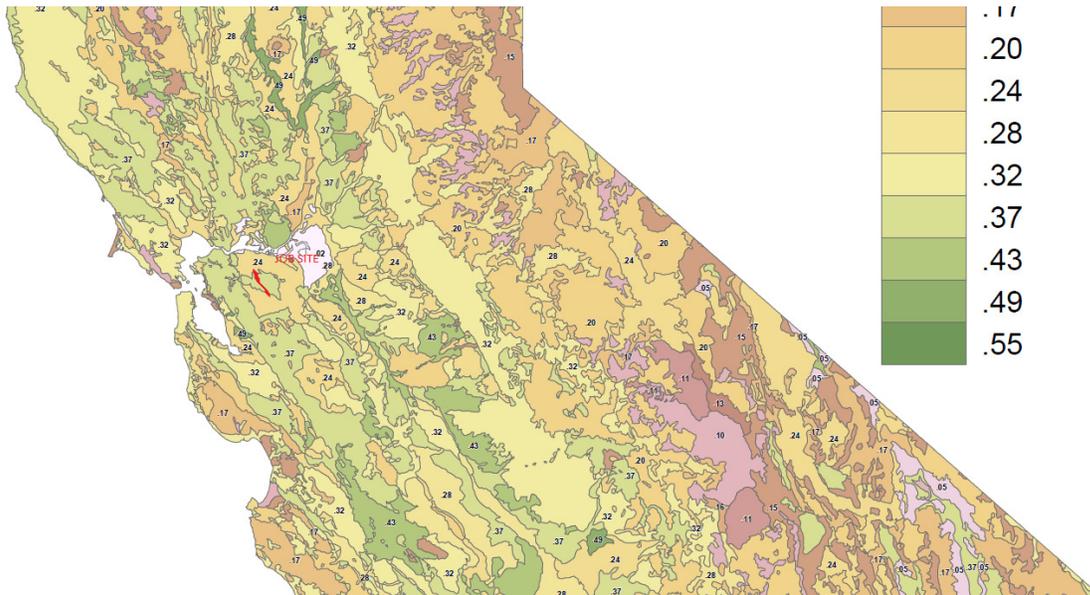
Project Combined Risk: **Level 1**

LS = 3.78



K=2.4-3.7

[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/docs/constpermits/guidance/k\\_factor\\_map.pdf](http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/guidance/k_factor_map.pdf)



Construction from 04/05/2016 to 10/15/2016 150 WDS (updated 02-05-2015 WQC info sheet)

**R=4.14 <5 DSA = 1.1 ace <5 ace might qualify for waiver. However, still go for SWPPP**

1ss47 (0412000606)

02-27-2015

You are here: [Water](#) » [Pollution Prevention & Control](#) » [Permitting \(NPDES\)](#) » [Stormwater](#) » LEW Results

## LEW Results

### Rainfall Erosivity Factor Calculator for Small Construction Sites

#### Facility Information

Start Date: 04/15/2016  
 End Date: 10/15/2016  
 Latitude: 37.8550  
 Longitude: -122.0295

#### Erosivity Index Calculator Results

AN EROSIIVITY INDEX VALUE OF **4.14** HAS BEEN DETERMINED FOR THE CONSTRUCTION PERIOD OF **04/15/2016** - **10/15/2016**.

A rainfall erosivity factor of less than 5.0 has been calculated for your site and period of construction. Contact your permitting authority to determine if you are eligible for a waiver from NPDES permitting requirements. If you are covered under EPA's [construction general permit](#) then you can use eNOI to submit your low erosivity waiver certification.

If your construction activity extends past the project completion date you specified above, you must recalculate the R factor using the original start date and a new project completion date. If the recalculated R factor is still less than 5.0, a new waiver certification form must be submitted before the end of the original construction period. If the new R factor is 5.0 or greater, the operator must submit a Notice of Intent to be covered by the Construction General Permit before the original project completion date.

Risk watershed: low

Not on 303(d) list and TMDLs and Beneficial Use (no COLD, MIGR and SPWN listed)

COUNTY	Waterbody	AGR	MUN	FRESH	GWR	IND	PROC	COMM	SHELL	COLD	EST	MAR	MIGR	RARE	SPWN	WARM	WILD	REC-1	REC-2	NAV
<i>ALAMEDA COUNTY, continued</i>																				
	Indian Creek (central Alameda)			E						E				E	E	E	E	E*	E	
	La Costa Creek			E						E				E	E	E	E	E	E	
	Arroyo de la Laguna				E								E		E	E	E	E	E	
	Vallecitos Creek															E	E	E	E	
	Happy Valley Creek															E	E	E	E	
	Sycamore Creek															E	E	E	E	
	Arroyo del Valle		E		E					E			P	E	E	E	E	E	E	
	Shadow Cliffs Reservoir				E			E		E					E	E	E	E	E	
	Del Valle Reservoir		E					E		E					E	E	E	E	E	
	Arroyo Mocho				E					E					E	E	E	E	E	
	Tassajata Creek				E								P	E	E	E	E	E	E	
	Arroyo las Positas				E					E				E	E	E	E	E	E	
	Cottonwood Creek													E		E	E	E	E	
	Collier Canyon Creek														E	E	E	E	E	
	Cayetano Creek													E		E	E	E	E	
	Arroyo Seco (Alameda)				E					E			E	E	E	E	E	E	E	
	Altamont Creek				E					E				E		E	E	E	E	
	Alamo Canal				E					P			E		E	E	E	E	E	
	Alamo Creek				E					P			E	E	E	E	E	E	E	
	Dublin Creek															E	E	E	E	
	Martin Canyon Creek															E	E	E	E	
	South San Ramon Creek															E	E	E	E	
<i>SANTA CLARA COUNTY</i>																				
<i>Tributary to Alameda Creek:</i>																				
	Calaveras Creek			E						E				E	E	E	E	E	E	

## Rainfall Data

Rainfall Intensity can be obtained by the following link:

<http://www.wrcc.dri.edu/pcpnfreq/nca5y24.gif>

Refer to chapters 800, Highway Drainage Design of Highway Design Manual for information on runoff coefficient and shed map.

**Conceptual Temporary  
Water Pollution Control Drawings**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** WATER QUALITY

FUNCTIONAL SUPERVISOR: KAMRAN NAKHJURI

REVISOR: SHARON YUAN

DESIGNER: SHARON YUAN

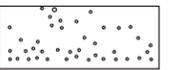
CHECKED BY: SHARON YUAN

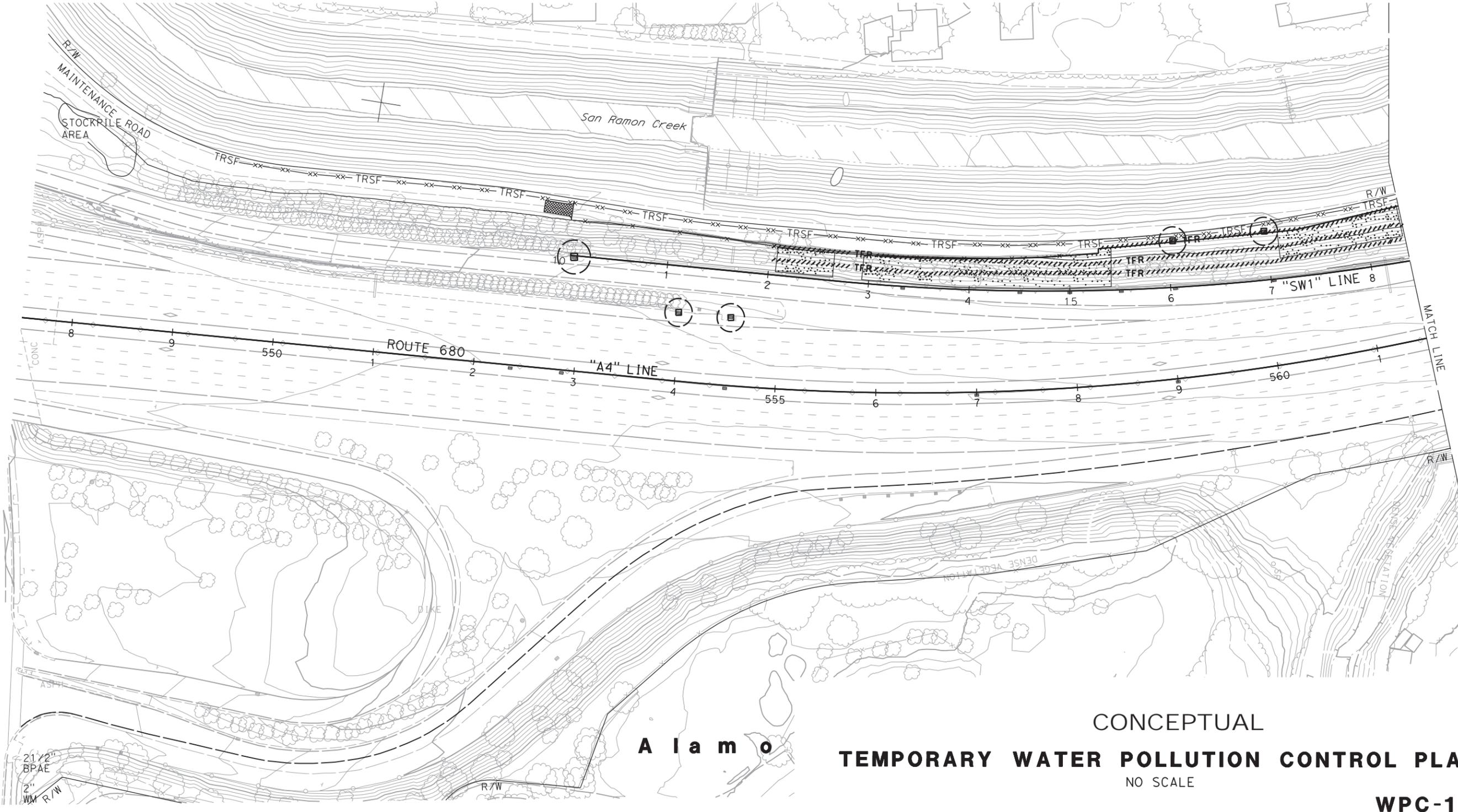
DATE: 7/2/2010

**NOTE:**  
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT  
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

**GENERAL WATER POLLUTION CONTROL NOTE:**  
 TEMPORARY BMP LOCATIONS ARE DESIGNED BASED ON DISTURBED AREAS AND WATER FLOW PATTERNS  
 INFORMATION AVAILABLE AT DESIGN PHASE. CONTRACTOR IS RESPONSIBLE TO DEVELOPE A WPCP  
 THAT STABILIZES ALL DISTURBED INCLUDING AREAS THAT WERE NOT EXPECTED TO BE DISTURBED  
 COMPLIES WITH THE PERMITS, LICENSES, AGREEMENTS, AND CERTIFICATIONS (PLACS).

**WATER POLLUTION CONTROL LEGENDS:**

-  TEMPORARY CONSTRUCTION ENTRANCE
-  TEMPORARY FIBER ROLL (TFR)
-  TEMPORARY EROSION CONTROL (BFM)
-  TEMPORARY DRAINAGE INLET PROTECTION



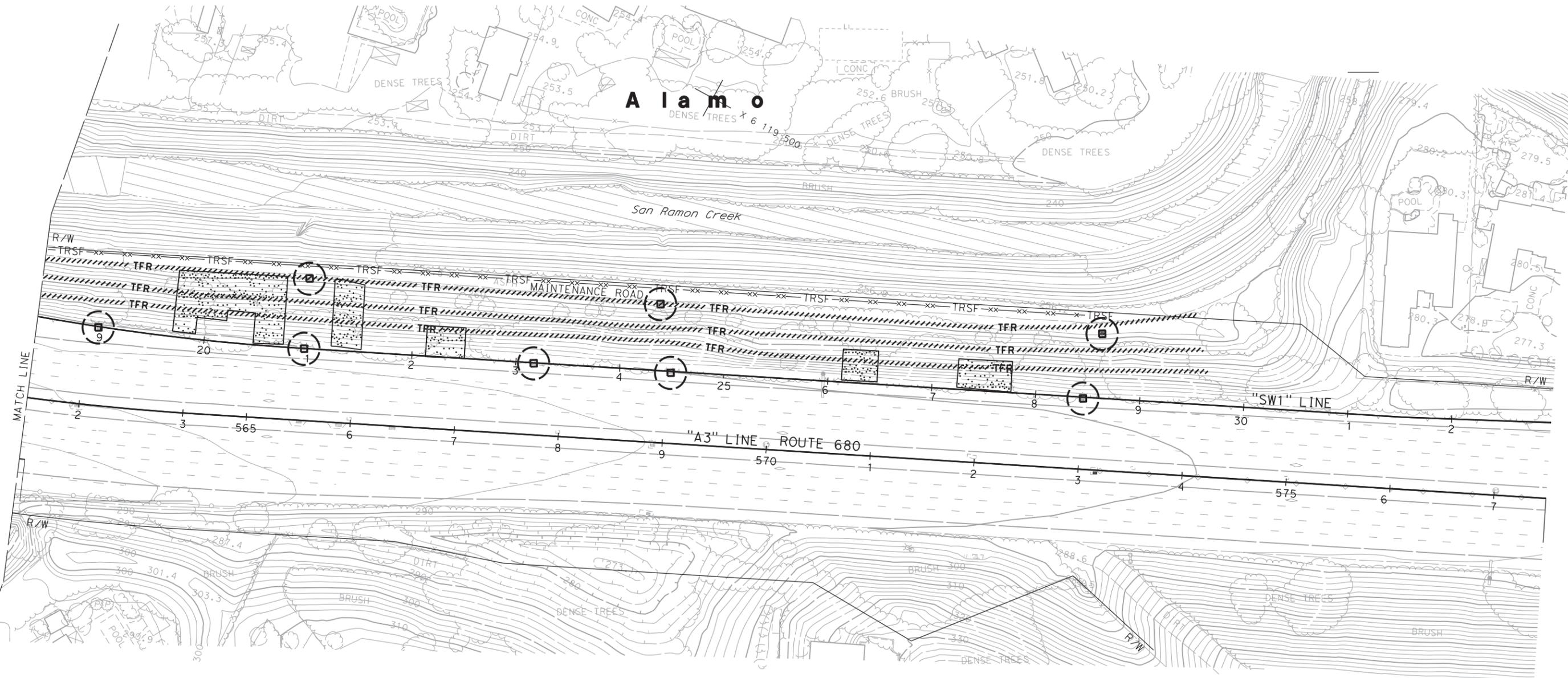
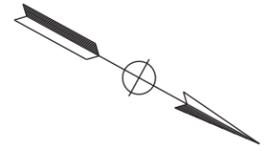
**Alamo**

**CONCEPTUAL  
 TEMPORARY WATER POLLUTION CONTROL PLAN**  
 NO SCALE

**WPC-1**

LAST REVISION: DATE PLOTTED => 5/15/2015  
 11-10-14 TIME PLOTTED => 2:25:28 PM

NOTE:  
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT  
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION <b>Caltrans</b> WATER QUALITY	FUNCTIONAL SUPERVISOR KAMRAN NAKHJURI	CALCULATED-DESIGNED BY CHECKED BY	SHARON YUAN SHARON YUAN	REVISED BY DATE REVISED

CONCEPTUAL  
**TEMPORARY WATER POLLUTION CONTROL PLAN**  
 NO SCALE  
**WPC-2**

LAST REVISION    DATE PLOTTED => 5/15/2015  
 11-10-14    TIME PLOTTED => 2:38:22 PM



# PRELIMINARY SITE INVESTIGATION REPORT

## INTERSTATE 680 STONE VALLEY ROAD OFF-RAMP CONTRA COSTA COUNTY, CALIFORNIA

PREPARED FOR:

CALIFORNIA DEPARTMENT OF TRANSPORTATION  
DISTRICT 4  
OFFICE OF ENVIRONMENTAL ENGINEERING  
111 GRAND AVENUE  
OAKLAND, CALIFORNIA



PREPARED BY:

GEOCON CONSULTANTS, INC.  
6671 BRISA STREET  
LIVERMORE, CALIFORNIA



GEOCON PROJECT NO. E8721-02-03  
CALTRANS EA 04-1SS471  
CALTRANS PROJECT NO. 04-1200-0606-1

JUNE 2014

## 6.0 CONCLUSIONS

### 6.1 CAM 17 Metals in Soil

CAM 17 metals were reported in the samples at total concentrations below ten times their respective STLCs. Therefore, soil would also be classified as non-hazardous based on CAM17 metals concentrations.

The CAM 17 metals concentrations in site soil were compared to ESLs. Arsenic was reported at concentrations greater than one or more ESL values. Statistical methods were used to calculate the upper confidence limit (UCL) of the arithmetic mean of the total arsenic concentrations. The upper one-sided 95% UCL of the arithmetic mean is defined as the value that, when calculated repeatedly for randomly drawn subsets of site data, equals or exceeds the true mean 95% of the time. The UCL of the arithmetic mean concentration is used as the mean concentration because it is not possible to know the true mean due to the essentially infinite number of soil samples that could be collected from a site. The 95% UCL, therefore, accounts for uncertainties due to limited sampling data. As data become less limited at a site, uncertainties decrease, and the UCL moves closer to the true mean.

Non-parametric bootstrap techniques were used to calculate the 95% UCL. The bootstrap test result is included in Appendix B. ESLs, UCL, and published background concentrations for arsenic are summarized in the table below.

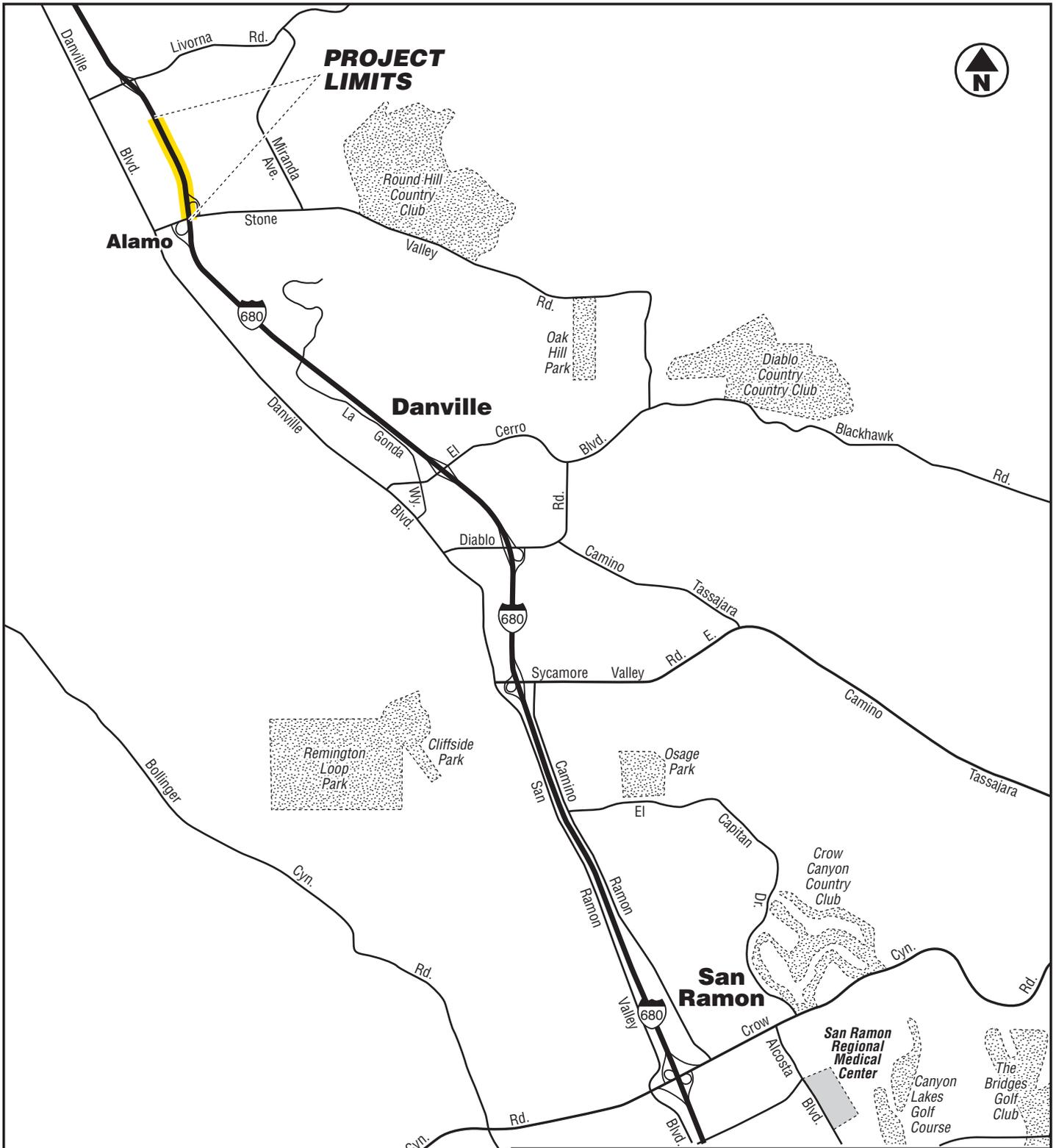
<b>Metal</b>	<b>Maximum</b>	<b>95% UCL</b>	<b>Shallow Soil Residential ESL</b>	<b>Shallow Soil Commercial/ Industrial ESL</b>	<b>Worker Direct Exposure ESL</b>	<b>Published Background Mean<sup>1</sup></b>	<b>Published Background Range<sup>1</sup></b>
Arsenic	8.3	5.75	0.39	1.6	10	3.5	0.6 to 11.0

Concentrations reported in mg/kg

<sup>1</sup> Kearney Foundation of Soil Science, March 1996

The 95% UCL arsenic concentration is greater than the residential and commercial land use ESLs; however, it is less than the construction exposure ESL and within the published background range. The *SFRWQCB November 2007 Update to Environmental Screening Levels (ESLs) Technical Document* states that ambient background concentrations of arsenic typically exceed risk-based screening levels. In such instances, it may be more appropriate to compare site data to regionally specific established background levels.

Based on the reported results for arsenic, reuse or disposal of excavated soil may be restricted depending on proposed use.



 <b>GEOCON</b> CONSULTANTS, INC. 6671 BRISA STREET - LIVERMORE, CA 94550 PHONE 925.371.5900 - FAX 925.371.5915	
Interstate 680 Post Mile 10.3/10.9	
Stone Valley Road Offramp Alamo, California	<b>VICINITY MAP</b>
GEOCON Proj. No. E8721-02-03	
Task Order No. 3	June 2014 Figure 1



6671 BRISA STREET, LIVERMORE, CA 94550; PHONE 925 371-5900 - FAX 925 371-5915

Interstate 680 Post Mile 10.3/10.9

Stone Valley Road Offramp  
Alamo, California

GEOCON Proj. No. E8721-02-03

Task Order No. 3

**SITE PLAN**

Figure 2



**LEGEND:**  
● Boring Location

**TABLE 2**  
**Summary of Lead and pH Results**  
**I-680 Slope Protection**  
**Alamo, California**

Sample ID	Sample Depth (feet)	Total Lead (mg/kg)	pH
B1-0.5	0.5 to 1	11	8.1
B1-1.5	1.5 to 2	6.7	---
B1-3.0	3 to 3.5	5.8	8.3
B1-6.0	6 to 6.5	5.7	8.0
B2-0.5	0.5 to 1	14	8.2
B2-1.5	1.5 to 2	7.6	---
B2-3.0	3 to 3.5	6.4	8.0
B3-0.5	0.5 to 1	13	8.3
B3-1.5	1.5 to 2	9.4	---
B3-3.0	3 to 3.5	7.1	8.1
B3-6.0	6 to 6.5	6.4	8.1
B4-0.5	0.5 to 1	8.8	8.5
B4-1.5	1.5 to 2	6.4	---
B4-3.0	3 to 3.5	6.6	7.9
B4-6.0	6 to 6.5	5.9	8.1
B5-0.5	0.5 to 1	7.7	7.9
B5-1.5	1.5 to 2	11	---
B5-3.0	3 to 3.5	6.1	7.7
B5-6.0	6 to 6.5	4.9	7.6
B6-0.5	0.5 to 1	6.9	8.3
B6-1.5	1.5 to 2	7.1	---
B6-3.0	3 to 3.5	7.7	8.1
B6-6.0	6 to 6.5	7.2	7.6
B7-0.5	0.5 to 1	15	8.2
B7-1.5	1.5 to 2	8.5	---
B7-3.0	3 to 3.5	5.1	8.1
B7-6.0	6 to 6.5	4.3	7.8
B8-0.5	0.5 to 1	20	7.7
B8-1.5	1.5 to 2	10	---
B8-3.0	3 to 3.5	7.0	7.8
B8-6.0	6 to 6.5	6.3	7.8

**TABLE 2**  
**Summary of Lead and pH Results**  
**I-680 Slope Protection**  
**Alamo, California**

Sample ID	Sample Depth (feet)	Total Lead (mg/kg)	pH
B9-0.5	0.5 to 1	20	7.8
B9-1.5	1.5 to 2	18	---
B9-3.0	3 to 3.5	6.3	7.8
B9-6.0	6 to 6.5	5.6	7.8
RB (rinse Blank)		<0.0050 mg/l	
<b><u>Hazardous Waste Criteria</u></b>			
	TTLIC (mg/kg)	1,000	---

**Notes:**

mg/kg = Milligrams per kilogram

mg/l = Milligrams per liter

TTLIC = Total Threshold Limit Concentration

**TABLE 3**  
**Summary of CAM 17 Metals Results**  
**I-680 Slope Protection**  
**Alamo, California**

Sample ID	Sample Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
B1-0.5	0.5 to 1	<2.0	5.8	91	<1.0	<1.0	24	8.0	15	11	<0.10	<1.0	20	1.8	<1.0	<1.0	44	51
B1-1.5	1.5 to 2	<2.0	5.2	110	<1.0	<1.0	19	7.2	14	6.7	<0.098	<1.0	19	1.4	<1.0	<1.0	30	43
B1-6.0	6 to 6.5	<2.0	5.2	99	<1.0	<1.0	19	6.7	14	5.7	<0.099	<1.0	20	<1.0	<1.0	<1.0	28	39
B2-0.5	0. to 1	<2.0	5.5	80	<1.0	<1.0	24	8.4	16	14	<0.10	<1.0	26	1.9	<1.0	<1.0	40	49
B2-1.5	1.5 to 2	<2.0	6.4	80	<1.0	<1.0	16	6.9	13	7.6	<0.10	<1.0	17	1.4	<1.0	<1.0	26	38
B3-0.5	0.5 to 1	<2.0	5.7	82	<1.0	<1.0	19	6.6	14	13	<0.099	<1.0	18	1.4	<1.0	<1.0	29	46
B3-1.5	1.5 to 2	<2.0	5.2	89	<1.0	<1.0	17	7.6	13	9.4	<0.099	<1.0	18	1.2	<1.0	<1.0	27	39
B3-6.0	6 to 6.5	<2.0	8.3	88	<1.0	<1.0	18	6.7	14	6.4	<0.10	<1.0	18	1.1	<1.0	<1.0	28	38
B4-0.5	0.5 to 1	<2.0	5.5	110	<1.0	<1.0	19	6.9	13	8.8	<0.099	<1.0	19	1.2	<1.0	<1.0	29	47
B4-1.5	1.5 to 2	<2.0	5.4	77	<1.0	<1.0	18	6.3	13	6.4	<0.10	<1.0	16	1.1	<1.0	<1.0	27	38
B4-6.0	6 to 6.5	<2.0	4.9	87	<1.0	<1.0	18	7.6	14	5.9	<0.099	<1.0	18	1.1	<1.0	<1.0	29	37
B5-0.5	0.5 to 1	<2.0	6.8	97	<1.0	<1.0	19	6.0	21	7.7	<0.10	<1.0	20	1.7	<1.0	<1.0	24	52
B5-1.5	1.5 to 2	<2.0	6.6	86	<1.0	<1.0	20	6.9	17	11	<0.10	<1.0	23	1.9	<1.0	<1.0	26	47
B5-6.0	6 to 6.5	<2.0	4.6	79	<1.0	<1.0	17	4.0	8.0	4.9	<0.10	<1.0	15	<1.0	<1.0	<1.0	18	30
B6-0.5	0.5 to 1	<2.0	5.1	100	<1.0	<1.0	20	7.0	13	6.9	<0.10	<1.0	18	<1.0	<1.0	<1.0	30	42
B6-1.5	1.5 to 2	<2.0	4.2	120	<1.0	<1.0	18	5.9	11	7.1	<0.10	<1.0	16	1.0	<1.0	<1.0	26	41
B6-6.0	6 to 6.5	<2.0	6.6	110	<1.0	<1.0	16	6.1	12	7.2	<0.098	<1.0	15	<1.0	<1.0	<1.0	24	33
B7-0.5	0.5 to 1	<2.0	5.6	100	<1.0	<1.0	19	7.0	14	15	<0.10	<1.0	19	1.3	<1.0	<1.0	31	47
B7-1.5	1.5 to 2	<2.0	5.5	98	<1.0	<1.0	18	6.5	14	8.5	<0.10	<1.0	18	<1.0	<1.0	<1.0	27	39
B7-6.0	6 to 6.5	<2.0	2.7	150	<1.0	<1.0	17	6.6	14	4.3	<0.099	<1.0	16	<1.0	<1.0	<1.0	25	35
B8-0.5	0.5 to 1	<2.0	4.9	100	<1.0	<1.0	20	6.8	15	20	<0.10	<1.0	19	1.4	<1.0	<1.0	31	49
B8-1.5	1.5 to 2	<2.0	5.6	110	<1.0	<1.0	20	6.9	14	10	<0.10	<1.0	19	1.3	<1.0	<1.0	30	43
B8-6.0	6 to 6.5	<2.0	5.0	110	<1.0	<1.0	19	6.9	15	6.3	<0.099	<1.0	19	1.6	<1.0	<1.0	27	42

**TABLE 3**  
**Summary of CAM 17 Metals Results**  
**I-680 Slope Protection**  
**Alamo, California**

Sample ID	Sample Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
B9-0.5	0.5 to 1	<2.0	4.6	110	<1.0	<1.0	22	8.5	24	20	<0.098	<1.0	23	1.7	<1.0	<1.0	34	78	
B9-1.5	1.5 to 2	<2.0	4.7	120	<1.0	<1.0	21	7.6	22	18	<0.10	<1.0	22	1.1	<1.0	<1.0	30	66	
B9-6.0	6 to 6.5	<2.0	5.4	120	<1.0	<1.0	18	6.8	15	5.6	<0.099	<1.0	19	<1.0	<1.0	<1.0	26	41	
<b>ESLs</b>																			
Residential Land Use		20	0.39	750	4.0	12	1,000	23	230	80	6.7	40	150	10	20	0.78	200	600	
Commercial/Industrial Land Use		40	1.6	1,500	8.0	12	2,500	80	230	320	10	40	150	10	40	10	200	600	
Construction Worker Exposure		120	10	61,000	180	110	460,000*	49	12,000	320	27	1,500	6,100	1,500	1,500	3.1	1,500	93,000	
<b>Hazardous Waste Criteria</b>																			
TTLC (mg/kg)		500	500	10,000	75	100	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000	
STLC (mg/l)		15	5.0	100	0.75	1.0	5.0	80	25	5.0	0.2	350	20	1.0	5.0	7.0	24	250	
TCLP (mg/l)		--	5.0	100	--	1.0	6.0	--	--	5.0	0.2	--	--	1.0	5.0	--	--	--	

**Notes:**  
 Results are shown in milligrams per kilogram (mg/kg).  
 \*Value listed is for Chromium III, as there is no construction exposure standard for total chromium.  
 < = Analyte was not detected above the laboratory reporting limit.  
 ESLs = Environmental Screening Levels, Tables A and K-3, SFRWQCB, December 2013.  
 TTLC = total threshold limit concentration  
 STLC = soluble threshold limit concentration  
 TCLP = toxicity characteristic leaching procedure

**TABLE 4**  
**Summary of Petroleum Hydrocarbons Results**  
**I-680 Slope Protection**  
**Alamo, California**

<b>Sample ID</b>	<b>Sample Depth (ft)</b>	<b>TPHd (mg/kg)</b>	<b>TPHmo (mg/kg)</b>	<b>TPHg (mg/kg)</b>
B1-0.5	0.5 to 1	3.6	17	---
B1-1.5	1.5 to 2	---	---	<1.0
B1-3.0	3 to 3.5	2.4	3.5	<1.0
B1-6.0	6 to 6.5	1.8	3.4	<1.0
B2-0.5	0.5 to 1	7.9	25	---
B2-1.5	1.5 to 2	---	---	<1.0
B2-3.0	3 to 3.5	4.2	10	<1.0
B3-0.5	0.5 to 1	3.6	15	---
B3-1.5	1.5 to 2	---	---	<1.0
B3-3.0	3 to 3.5	1.9	2.4	<1.0
B3-6.0	6 to 6.5	<1.0	1.5	<1.0
B4-0.5	0.5 to 1	2.1	6.9	---
B4-1.5	1.5 to 2	---	---	<1.0
B4-3.0	3 to 3.5	1.3	1.6	<1.0
B4-6.0	6 to 6.5	<1.0	1.3	<1.0
B5-0.5	0.5 to 1	3.8	14	---
B5-1.5	1.5 to 2	---	---	<1.0
B5-3.0	3 to 3.5	3.0	5.4	<1.0
B5-6.0	6 to 6.5	3.0	5.8	<1.0
B6-0.5	0.5 to 1	1.9	3.5	---
B6-1.5	1.5 to 2	---	---	<1.0
B6-3.0	3 to 3.5	1.9	3.6	<1.0
B6-6.0	6 to 6.5	1.6	3.5	<1.0
B7-0.5	0.5 to 1	5.2	22	
B7-1.5	1.5 to 2	---	---	<1.0
B7-3.0	3 to 3.5	1.2	1.7	<1.0
B7-6.0	6 to 6.5	<1.0	1.2	<1.0
B8-0.5	0.5 to 1	19	69	---
B8-1.5	1.5 to 2	---	---	<1.0
B8-3.0	3 to 3.5	3.3	5.2	<1.0
B8-6.0	6 to 6.5	14	22	<1.0

**TABLE 4**  
**Summary of Petroleum Hydrocarbons Results**  
**I-680 Slope Protection**  
**Alamo, California**

<b>Sample ID</b>	<b>Sample Depth (ft)</b>	<b>TPHd (mg/kg)</b>	<b>TPHmo (mg/kg)</b>	<b>TPHg (mg/kg)</b>
B9-0.5	0.5 to 1	35	110	---
B9-1.5	1.5 to 2	---	---	<1.0
B9-3.0	3 to 3.5	2.5	4.3	<1.0
B9-6.0	6 to 6.5	1.1	1.5	<1.0

<u>ESLs</u>				
	Residential	100	100	100
	Commercial/Industrial	110	500	500
	Construction Exposure	900	28,000	2,700

Notes:

mg/kg = milligrams per kilogram

TPHd = Total petroleum hydrocarbons as diesel

TPHmo = Total petroleum hydrocarbons as motor oil

TPHg = Total petroleum hydrocarbons as gasoline

--- = Not analyzed or no standard for this compound

< = Not detected at or above the stated laboratory reporting limit

ESLs = Environmental Screening Levels, Tables A and K-3, SFRWQCB, December 2013.

**TABLE 5**  
**Summary of NOA Results**  
**I-680 Slope Protection**  
**Alamo, California**

Sample ID	Sample Depth (feet)	Asbestos Content (% dry weight)
B1-0.5	0.5 to 1	ND
B1-1.5	1.5 to 2	ND
B1-3.0	3 to 3.5	ND
B1-6.0	6 to 6.5	ND
B2-0.5	0.5 to 1	ND
B2-1.5	1.5 to 2	ND
B2-3.0	3 to 3.5	ND
B3-0.5	0.5 to 1	ND
B3-1.5	1.5 to 2	ND
B3-3.0	3 to 3.5	ND
B3-6.0	6 to 6.5	ND
B4-0.5	0.5 to 1	ND
B4-1.5	1.5 to 2	ND
B4-3.0	3 to 3.5	ND
B4-6.0	6 to 6.5	ND
B5-0.5	0.5 to 1	ND
B5-1.5	1.5 to 2	ND
B5-3.0	3 to 3.5	ND
B5-6.0	6 to 6.5	ND
B6-0.5	0.5 to 1	ND
B6-1.5	1.5 to 2	ND
B6-3.0	3 to 3.5	ND
B6-6.0	6 to 6.5	ND
B7-0.5	0.5 to 1	ND
B7-1.5	1.5 to 2	ND
B7-3.0	3 to 3.5	ND
B7-6.0	6 to 6.5	ND
B8-0.5	0.5 to 1	ND
B8-1.5	1.5 to 2	ND
B8-3.0	3 to 3.5	ND
B8-6.0	6 to 6.5	ND
B9-0.5	0.5 to 1	ND
B9-1.5	1.5 to 2	ND
B9-3.0	3 to 3.5	ND
B9-6.0	6 to 6.5	ND

---

ND = None detected at 0.25% target analytical sensitivity.

# **NONPOTABLE WATER SOURCE INFORMATION**

# Bay Area Recycled Water Commercial Truck Fill Facilities Location Guide January 2015



## **Background**

This Guide was prepared by Whitley Burchett & Associates under contract with Bay Area Clean Water Agencies and under the direction of the BACWA Recycled Water Committee.

The Guide was prepared in response to inquiries of commercial recycled water truck fill facilities in the Bay Area. It is the Recycled Water Committee's intention to update this Guide annually. If you see any information that should be updated, have a facility to add to this Guide, or have any questions please email [Info@bacwa.org](mailto:Info@bacwa.org).

## **Disclaimer**

The intent of this Guide is to provide prospective water haulers with general information regarding the location of Bay Area Recycled Water Commercial Truck Fill Facilities, permit requirements, and associated fees for recycled water. Information in this Guide represents data collected in the fall of 2014. Please contact agencies directly for current information.

## **Cover Photos**

Top row from left to right: San Francisco Public Utilities Commission,  
Dublin San Ramon Services District

Bottom row: East Bay Municipal Utility District

## **Acknowledgements**

This Guide was prepared in conjunction with the BACWA agencies. The time spent by agencies providing program information and review of this document is greatly appreciated.

## **Electronic Version**

The BACWA Truck Fill Guide is available on the BACWA website at <http://bacwa.org>.

# TABLE OF CONTENTS

*Bay Area Commercial Recycled Water Truck Fill Facilities Location Map..... ii*  
*List of Agencies with Commercial Fill Facilities Sorted by County/City..... iii*

## **SECTION 1 - RECYCLED WATER COMMERCIAL TRUCK FILL FACILITIES INFORMATION**

Calistoga, City of..... 1  
Central Contra Costa Sanitary District..... 2  
Dublin San Ramon Services District..... 3  
East Bay Municipal Utility District..... 4  
Livermore, City of..... 5  
Marin Municipal Water District..... 6  
Milpitas, City of..... 7  
Napa Sanitation District..... 8  
North Marin Water District..... 9  
Oro Loma/East Bay Dischargers Authority..... 10  
Palo Alto, City of..... 11  
Petaluma, City of..... 12  
Redwood City, City of..... 13  
San Francisco International Airport..... 14  
San Francisco Public Utilities Commission..... 15  
Santa Rosa, City of..... 16  
Sonoma County Water Agency..... 17  
South Bay Water Recycling and City of San Jose..... 18  
Sunnyvale, City of..... 19  
Yountville, Town of..... 20

## **SECTION 2 - ADDITIONAL COMMERCIAL TRUCK FILL FACILITIES IN 2015**

Commercial Fill Facilities Planned to be Operational in 2015..... 21

## **SECTION 3 - POTENTIAL FUTURE COMMERCIAL TRUCK FILL FACILITIES**

Agencies That May Consider Fill Facilities in the Future..... 22

## **SECTION 4 - Recycled Water Uses Allowed in California**

Recycled Water Uses Allowed in California..... 23

# Bay Area Commercial Recycled Water Truck Fill Facilities Location Map



\* Indicates the general location of a truck fill facility.

**List of Agencies with Recycled Water Commercial Truck Fill Facilities  
Sorted by County/City**

<b>COUNTY/CITY</b>	<b>AGENCY</b>	<b>PAGE NO.</b>
<b>ALAMEDA COUNTY</b>		
Dublin	Dublin San Ramon Services District	3
Livermore	City of Livermore	5
Oakland	East Bay Municipal Utility District	4
San Lorenzo	Oro Loma/East Bay Dischargers Authority	10
<b>CONTRA COSTA COUNTY</b>		
Concord	Central Contra Costa Sanitary District	2
Martinez	Central Contra Costa Sanitary District	2
Richmond	East Bay Municipal Utility District	4
<b>MARIN COUNTY</b>		
Novato	North Marin Water District	9
San Rafael	Marin Municipal Water District	6
<b>NAPA COUNTY</b>		
Calistoga	City of Calistoga	1
Napa	Napa Sanitation District	8
Yountville	Town of Yountville	20
<b>SAN FRANCISCO</b>		
San Francisco	San Francisco Public Utilities Commission	15
<b>SAN MATEO COUNTY</b>		
San Francisco	San Francisco International Airport	14
Redwood City	City of Redwood City	13
<b>SANTA CLARA COUNTY</b>		
Milpitas	City of Milpitas	7
Palo Alto	City of Palo Alto	11
San Jose	South Bay Water Recycling and City of San Jose	18
Sunnyvale	City of Sunnyvale	19
<b>SONOMA COUNTY</b>		
Petaluma	City of Petaluma	12
Santa Rosa	City of Santa Rosa	16
Sonoma	Sonoma County Water Agency	17

***SECTION 1***

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**Recycled Water Commercial Truck Fill Facilities Information**





**DUBLIN SAN RAMON SERVICES DISTRICT**

925.875.2334

[www.dsrdsd.com](http://www.dsrdsd.com)**Recycled Water Fill Facilities:**

Treatment Plant Yes

Distribution System Yes

Can water be used outside of this agency's service area? Yes

**Hydrant Fill Facilities**

Location: Dublin, CA - see website for locations

Number of Fill Facilities: 10+

Connection Device: Construction Meter

Quality: Disinfected Tertiary

Truck Size Limits: None

Quantity Limitations per Trip: No Minimum

Truck Weight Limits: None

Maximum up to truck limit

Other Restrictions: Permit plus \$1,000 refundable deposit for meter required.

Additional Access Information: Obtain permit and meter at 7051 Dublin Blvd, Dublin.

**Fill Facilities at Treatment Plant**

Location: DSRSD Wastewater Treatment Plant

7399 Johnson Drive, Pleasanton

Quality: Disinfected Tertiary

Type of Connection: Overhead and Large Hose Bib

Quantity Limitations per Trip: No Minimum

Hours: 24 hrs/day, 7 days/wk\*

Maximum up to truck limit

Appointment Required: No

Quantity Limitations per Day: No Minimum

Truck Size Limits: None

No Maximum

Truck Weight Limits: None

Additional Access Information: \*After business hours truck drivers must use special gate access code to enter the plant. The access code is valid only during hours specified in the permit.

**Training**

Required: Yes

Duration: 15 min

Who: Truck Owner and Driver

Frequency: Once

Schedule: By Appointment

Location: Recycled Water Plant

Length of time to become authorized truck hauler: 1 business day

**Signage**

Area Use Signage Required: No

Vehicle Signage Required: Yes

Signs Provided by Water Agency: N/A

Signs Provided by Water Agency: Yes

**Vehicle Inspection**

Required: No

Inspection Location:

Duration:

Re-inspection Required:

How to schedule:

**Fees**Water: Hydrant- check with DSRSD  
for current fee;  
Plant- \$10/truck load

Training: No Charge

Permit: Hydrant- No permit fee;  
Treatment Plant- \$73/yearConnection Device: Hydrant access- \$1,000  
deposit for construction  
meter; Treatment Plant-

Use Area Signage: N/A

No connection device charge

Vehicle Signage: No Charge

Other:

**EAST BAY MUNICIPAL UTILITY DISTRICT**

**510.287.1346**

[www.ebmud.com](http://www.ebmud.com)

**Recycled Water Fill Facilities:**

Treatment Plant Yes

Distribution System No

Can water be used outside of this agency's service area? Check with EBMUD

**Hydrant Fill Facilities**

Location: None

Number of Fill Facilities:

Connection Device:

Quality:

Truck Size Limits:

Quantity Limitations per Trip:

Truck Weight Limits:

Other Restrictions:

Additional Access Information: [www.ebmud.com](http://www.ebmud.com), search "Recycled Water Truck Program"

**Fill Facilities at Treatment Plant**

Locations: 1) EBMUD Wastewater Treatment Plant, Oakland

2) North Richmond Water Recycling Plant, Richmond

Quality: Disinfected Tertiary

Type of Connection: Hydrant

Quantity Limitations per Trip: No Minimum

Hours: 24 hrs/day, 7 days/wk

Maximum up to truck limit

Appointment Required: Only for first visit

Quantity Limitations per Day: No Minimum

Truck Size Limits: None

No Maximum

Truck Weight Limits: None

Additional Access Information: 1) EBMUD Wastewater Treatment Plant - enter through the main security gate at the plant to obtain access to the fill hydrant. 2) North Richmond Plant - hydrant is located outside of the plant gate and is accessible with a hydrant key.

**Training**

Required: Yes

Duration: 15 minutes

Who: Truck Driver

Frequency: Once

Schedule: By Appointment

Location: Recycled Water Plant

Length of time to become authorized truck hauler: 5 business days

**Signage**

Area Use Signage Required: No

Vehicle Signage Required: Yes

Signs Provided by Water Agency: N/A

Signs Provided by Water Agency: Yes

**Vehicle Inspection**

Required: Yes

Inspection Location: Recycled Water Plant

Duration: Less than 1 hour

Re-inspection Required: No

How to schedule: To be conducted at time of training

**Fees**

Water: No Charge

Training: No Charge

Connection Device: No Charge

Permit: No Charge

Vehicle Signage: No Charge

Use Area Signage: N/A

Other:











<b>ORO LOMA</b>	
<b>510.276.4700</b>	
Recycled Water Fill Facilities:	
Treatment Plant Yes	Distribution System No
Can water be used outside of this agency's service area? Yes	
<b>Hydrant Fill Facilities</b>	
Location: None	
Number of Fill Facilities:	Connection Device:
Quality:	Truck Size Limits:
Quantity Limitations per Trip:	Truck Weight Limits:
Other Restrictions:	
Additional Access Information:	
<b>Fill Facilities at Treatment Plant</b>	
Location: Oro Loma Treatment Facility (call for address)	
Quality: Disinfected Secondary-2.2	Type of Connection: Overhead
Quantity Limitations per Trip: No Minimum	Hours: M-F: 6 a.m. - 5 p.m.
Maximum up to truck limit	Appointment Required: No
Quantity Limitations per Day: No Minimum	Truck Size Limits: None
No Maximum	Truck Weight Limits: None
Additional Access Information:	
<b>Training</b>	
Required: Yes	Duration: 15 min
Who: Truck Driver	Frequency: Once
Schedule: By Appointment	Location: Recycled Water Plant
Length of time to become authorized truck hauler: 1 business day	
<b>Signage</b>	
Area Use Signage Required: No	Vehicle Signage Required: No
Signs Provided by Water Agency: N/A	Signs Provided by Water Agency: N/A
<b>Vehicle Inspection</b>	
Required: No	Inspection Location:
Duration:	Re-inspection Required:
How to schedule:	
<b>Fees</b>	
Water: No Charge	Training: No Charge
Connection Device: No Charge	Permit: No Charge
Vehicle Signage: N/A	Use Area Signage: N/A
Other:	

<b>CITY OF PALO ALTO</b>	
<b>650.329.2598</b>	
Recycled Water Fill Facilities: Treatment Plant Yes <span style="float: right;">Distribution System No</span> Can water be used outside of this agency's service area? Yes	
<b>Hydrant Fill Facilities</b>	
Location: None Number of Fill Facilities: <span style="float: right;">Connection Device:</span> Quality: <span style="float: right;">Truck Size Limits:</span> Quantity Limitations per Trip: <span style="float: right;">Truck Weight Limits:</span> Other Restrictions: Additional Access Information:	
<b>Fill Facilities at Treatment Plant</b>	
Location: Palo Alto Regional Water Quality Control Plant (call for address) Quality: Disinfected Tertiary <span style="float: right;">Type of Connection: Overhead and Side</span> Quantity Limitations per Trip: No Minimum <span style="float: right;">Hours: Mon-Fri 6:30 a.m. - 5 p.m.</span> Maximum up to truck limit <span style="float: right;">Appointment Required: No</span> Quantity Limitations per Day: No Minimum <span style="float: right;">Truck Size Limits: None</span> No Maximum <span style="float: right;">Truck Weight Limits: None</span> Additional Access Information:	
<b>Training</b>	
Required: Yes <span style="float: right;">Duration: 2 hours or less</span> Who: Truck Driver <span style="float: right;">Frequency: Once</span> Schedule: By Appointment <span style="float: right;">Location: Recycled Water Plant</span> Length of time to become authorized truck hauler: 1 business day	
<b>Signage</b>	
Area Use Signage Required: Yes <span style="float: right;">Vehicle Signage Required: Yes</span> Signs Provided by Water Agency: No <span style="float: right;">Signs Provided by Water Agency: No</span>	
<b>Vehicle Inspection</b>	
Required: No <span style="float: right;">Inspection Location:</span> Duration: <span style="float: right;">Re-inspection Required:</span> How to schedule:	
<b>Fees</b>	
Water: No Charge <span style="float: right;">Training: No Charge</span> Connection Device: No Charge <span style="float: right;">Permit: \$50 per year</span> Vehicle Signage: User provides <span style="float: right;">Use Area Signage: User provides</span> Other:	







<b>SAN FRANCISCO PUBLIC UTILITIES COMMISSION</b>	
<b>415.695.7378</b>	
Recycled Water Fill Facilities: Treatment Plant Yes <span style="float: right;">Distribution System No</span> Can water be used outside of this agency's service area? No	
<b>Hydrant Fill Facilities</b>	
Location: None Number of Fill Facilities: <span style="float: right;">Connection Device:</span> Quality: <span style="float: right;">Truck Size Limits:</span> Quantity Limitations per Trip: <span style="float: right;">Truck Weight Limits:</span> Other Restrictions: Additional Access Information:	
<b>Fill Facilities at Treatment Plant</b>	
Location: South East Treatment Plant 750 Phelps Street, San Francisco Quality: Disinfected Secondary-23 <span style="float: right;">Type of Connection: Overhead and Side</span> Quantity Limitations per Trip: No Minimum <span style="float: right;">Hours: 24 hrs/day, 7 days/week</span> Maximum up to truck limit <span style="float: right;">Appointment Required:</span> Quantity Limitations per Day: No Minimum <span style="float: right;">Truck Size Limits: None</span> No Maximum <span style="float: right;">Truck Weight Limits: None</span> Additional Access Information: Access code and PIN provided at permit issuance	
<b>Training</b>	
Required: Yes <span style="float: right;">Duration: 2 hours or less</span> Who: Truck Driver <span style="float: right;">Frequency: Once</span> Schedule: By Appointment <span style="float: right;">Location: Treatment Plant</span> Length of time to become authorized truck hauler: 3 business days	
<b>Signage</b>	
Area Use Signage Required: Yes <span style="float: right;">Vehicle Signage Required: Yes</span> Signs Provided by Water Agency: No <span style="float: right;">Signs Provided by Water Agency: Yes</span>	
<b>Vehicle Inspection</b>	
Required: Yes <span style="float: right;">Inspection Location: Truck Fill Facility</span> Duration: 1 hour or less <span style="float: right;">Re-inspection Required: Not required</span> How to schedule: Appointment	
<b>Fees</b>	
Water: No Charge <span style="float: right;">Training: No Charge</span> Connection Device: No Charge <span style="float: right;">Permit: No Charge</span> Vehicle Signage: No Charge <span style="float: right;">Use Area Signage: No Charge</span> Other:	

<b>CITY OF SANTA ROSA</b>	
<b>707.543.3938</b>	
Recycled Water Fill Facilities:	
Treatment Plant Yes	Distribution System No
Can water be used outside of this agency's service area? Yes	
<b>Hydrant Fill Facilities</b>	
Location: None	
Number of Fill Facilities:	Connection Device:
Quality:	Truck Size Limits:
Quantity Limitations per Trip:	Truck Weight Limits:
Other Restrictions:	
Additional Access Information:	
<b>Fill Facilities at Treatment Plant</b>	
Location: Santa Rosa Subregional Water Reuse Plant	
Quality: Disinfected Tertiary	Type of Connection: Hydrant
Quantity Limitations per Trip: No Minimum	Hours: Mon-Fri 8 a.m. - 5:30 p.m.
Maximum up to truck limit	Appointment Required: No
Quantity Limitations per Day: No Minimum	Truck Size Limits: None
No Maximum	Truck Weight Limits: None
Additional Access Information:	
<b>Training</b>	
Required: No	Duration:
Who:	Frequency:
Schedule:	Location:
Length of time to become authorized truck hauler: 1 business day	
<b>Signage</b>	
Area Use Signage Required: No	Vehicle Signage Required: Yes
Signs Provided by Water Agency: N/A	Signs Provided by Water Agency: No
<b>Vehicle Inspection</b>	
Required: No	Inspection Location:
Duration:	Re-inspection Required:
How to schedule:	
<b>Fees</b>	
Water: \$5.09 per 1,000 gal	Training: No Charge
Connection Device: No Charge	Permit: \$15.00 per year
Vehicle Signage: N/A	Use Area Signage: No Charge
Other:	









***SECTION 2***

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**Additional Commercial Truck Fill Facilities in 2015**

## Commercial Fill Facilities Planned to be Operational in 2015

COUNTY/CITY	AGENCY
<b>SAN MATEO COUNTY</b>	
Pacifica	North Coast County Water District (contact for availability) Contact: <a href="http://www.nccwd.com">www.nccwd.com</a>
<b>SONOMA COUNTY</b>	
Windsor	Town of Windsor (operational Spring 2015) Contact: (707) 838-5343

***SECTION 3***

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**Potential Future Commercial Truck Fill Facilities**

## Agencies That May Consider Commerical Fill Facilities in the Future

At the time this Guide was prepared, the agencies below indicated they may consider development of commercial fill facilities, in particular if the drought continues.

COUNTY/CITY	AGENCY
<b>ALAMEDA COUNTY</b>	
Piedmont Union City	City of Piedmont Union Sanitary District
<b>CONTRA COSTA COUNTY</b>	
Antioch Brentwood Richmond	Delta Diablo Sanitation District City of Brentwood West County Wastewater District
<b>MARIN COUNTY</b>	
San Rafael	Ross Valley Sanitary District
<b>SAN FRANCISCO</b>	
South San Francisco	South San Francisco
<b>SAN MATEO COUNTY</b>	
Menlo Park San Mateo	West Bay Sanitary District City of San Mateo
<b>SOLANO COUNTY</b>	
Benicia	City of Benicia
<b>SONOMA COUNTY</b>	
Guerneville Petaluma Santa Rosa Santa Rosa Sonoma	Sonoma County Water Agency City of Petaluma City of Santa Rosa Sonoma County Water Agency Sonoma County Water Agency

***SECTION 4***

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**Recycled Water Uses Allowed in California**

# Recycled Water Uses Allowed<sup>1</sup> in California

Use of Recycled Water	Treatment Level			
	Disinfected Tertiary Recycled Water	Disinfected Secondary – 2.2 Recycled Water	Disinfected Secondary – 23 Recycled Water	Undisinfected Secondary Recycled Water
<b><i>Irrigation of:</i></b>				
Food crops where recycled water contacts the edible portion of the crop, including all root crops	Allowed	Not Allowed	Not Allowed	Not Allowed
Parks and playgrounds	Allowed	Not Allowed	Not Allowed	Not Allowed
School yards	Allowed	Not Allowed	Not Allowed	Not Allowed
Residential landscaping	Allowed	Not Allowed	Not Allowed	Not Allowed
Unrestricted-access golf courses	Allowed	Not Allowed	Not Allowed	Not Allowed
Any other irrigation uses not prohibited by other provisions of the California Code of Regulations	Allowed	Not Allowed	Not Allowed	Not Allowed
Food crops, surface-irrigated, above-ground edible portion, and not contacted by recycled water	Allowed	Allowed	Not Allowed	Not Allowed
Cemeteries	Allowed	Allowed	Allowed	Not Allowed
Freeway landscaping	Allowed	Allowed	Allowed	Not Allowed
Restricted-access golf courses	Allowed	Allowed	Allowed	Not Allowed
Ornamental nursery stock and sod farms with unrestricted public access	Allowed	Allowed	Allowed	Not Allowed
Pasture for milk animals for human consumption	Allowed	Allowed	Allowed	Not Allowed
Non-edible vegetation with access control to prevent use as a park, playground or school yard	Allowed	Allowed	Allowed	Not Allowed
Orchards with no contact between edible portion and recycled water	Allowed	Allowed	Not Allowed <sup>2</sup>	Not Allowed <sup>2</sup>
Vineyards with no contact between edible portion and recycled water	Allowed	Allowed	Not Allowed <sup>2</sup>	Not Allowed <sup>2</sup>
Non food-bearing trees, including Christmas trees not irrigated less than 14 days before harvest	Allowed	Allowed	Allowed	Allowed
Fodder and fiber crops and pasture for animals not producing milk for human consumption	Allowed	Allowed	Allowed	Allowed
Seed crops not eaten by humans	Allowed	Allowed	Allowed	Allowed
Food crops undergoing commercial pathogen-destroying processing before consumption by humans	Allowed	Allowed	Allowed	Allowed
Ornamental nursery stock, sod farms not irrigated less than 14 day before harvest	Allowed	Allowed	Allowed	Allowed
<b><i>Supply for impoundment:</i></b>				
Non-restricted recreational impoundments, with supplemental monitoring for pathogenic organisms	Allowed <sup>3</sup>	Not Allowed	Not Allowed	Not Allowed
Restricted recreational impoundments and publicly-accessible fish hatcheries	Allowed	Allowed	Not Allowed	Not Allowed
Landscape impoundments without decorative fountains	Allowed	Allowed	Allowed	Not Allowed
<b><i>Supply for cooling or air conditioning:</i></b>				
Industrial or commercial cooling or air conditioning involving cooling tower, evaporative condenser, or spraying that creates a mist	Allowed <sup>4</sup>	Not Allowed	Not Allowed	Not Allowed
Industrial or commercial cooling or air conditioning not involving cooling tower, evaporative condenser, or spraying that creates a mist	Allowed	Allowed	Allowed	Not Allowed

# Recycled Water Uses Allowed<sup>1</sup> in California

(continued)

Use of Recycled Water	Treatment Level			
	Disinfected Tertiary Recycled Water	Disinfected Secondary – 2.2 Recycled Water	Disinfected Secondary – 23 Recycled Water	Undisinfected Secondary Recycled Water
<i>Other uses:</i>				
Groundwater recharge	<b>Allowed</b> under special case-by-case permits by RWQCBs <sup>5</sup>			
Flushing toilets and urinals	<b>Allowed</b>	Not Allowed	Not Allowed	Not Allowed
Priming drain traps	<b>Allowed</b>	Not Allowed	Not Allowed	Not Allowed
Industrial process water that may contact workers	<b>Allowed</b>	Not Allowed	Not Allowed	Not Allowed
Structural fire fighting	<b>Allowed</b>	Not Allowed	Not Allowed	Not Allowed
Decorative fountains	<b>Allowed</b>	Not Allowed	Not Allowed	Not Allowed
Commercial laundries	<b>Allowed</b>	Not Allowed	Not Allowed	Not Allowed
Consolidation of backfill material around potable water pipelines	<b>Allowed</b>	Not Allowed	Not Allowed	Not Allowed
Artificial snow making for commercial outdoor uses	<b>Allowed</b>	Not Allowed	Not Allowed	Not Allowed
Commercial car washes, not heating the water, excluding the general public from washing process	<b>Allowed</b>	Not Allowed	Not Allowed	Not Allowed
Industrial process water that will not come into contact with workers	<b>Allowed</b>	<b>Allowed</b>	<b>Allowed</b>	Not Allowed
Industrial boiler feedwater	<b>Allowed</b>	<b>Allowed</b>	<b>Allowed</b>	Not Allowed
Non-structural fire fighting	<b>Allowed</b>	<b>Allowed</b>	<b>Allowed</b>	Not Allowed
Backfill consolidation around non-potable piping	<b>Allowed</b>	<b>Allowed</b>	<b>Allowed</b>	Not Allowed
Soil compaction	<b>Allowed</b>	<b>Allowed</b>	<b>Allowed</b>	Not Allowed
Mixing concrete	<b>Allowed</b>	<b>Allowed</b>	<b>Allowed</b>	Not Allowed
Dust control on roads and streets	<b>Allowed</b>	<b>Allowed</b>	<b>Allowed</b>	Not Allowed
Cleaning roads, sidewalks, and outdoor work areas	<b>Allowed</b>	<b>Allowed</b>	<b>Allowed</b>	Not Allowed
Flushing sanitary sewers	<b>Allowed</b>	<b>Allowed</b>	<b>Allowed</b>	<b>Allowed</b>

This summary is prepared from the December 2, 2000-adopted Title 22 Water Recycling Criteria and supersedes all earlier versions. Prepared by Bahman Sheikh and edited by EBMUD Office of Water Recycling, who acknowledge this is a summary and not the formal version of the regulations referenced above.

<sup>1</sup> Refer to the full text of the December 2, 2000 version of Title 22: California Code of Regulations, Chapter 3 Water Recycling Criteria. This chart is only an informal summary of the uses allowed in this version, with the exception of orchards and vineyards noted as "Not Allowed<sup>2</sup>" on page 1 and explained below.

<sup>2</sup> Per California Department of Public Health letter of January 8, 2003 to California Regional Water Quality Control Boards.

<sup>3</sup> Allowed with "conventional tertiary treatment." Additional monitoring for two years or more is necessary with direct filtration.

<sup>4</sup> Drift eliminators and/or biocides are required if public or employees can be exposed to mist.

<sup>5</sup> Refer to Groundwater Recharge Guidelines, available from the California Department of Public Health.



## Recycled Water Hydrant Truck Filling Program

Central Contra Costa Sanitary District (CCCSD) has installed a purple recycled water hydrant on our recycled water distribution system on Willow Way in Concord and on Marsh Drive in unincorporated North Concord. The hydrant can accommodate trucks ranging from 8 to 18 feet long with capacities ranging from 1,300 to 6,000 gallons (8 to 20 tons when full). CCCSD is issuing purple recycled water meters to licensed contractors for truck filling. Our Recycled Water Hydrant Truck Filling Program supplies high-quality, tertiary-treated recycled water for Title 22 allowed uses such as dust control, soil compaction, landscape irrigation and sewer flushing. The hours of use for the hydrant are 7 am to 5 pm Monday through Friday.

Recycled water meters will require a one-time refundable deposit of \$750 per meter and recycled water will be supplied for CCCSD's former potable use rate of \$3.28/1,000 gallons (effective July 1, 2014 –June 30, 2015). No additional fees will be charged for meter rental or public fire protection surcharges.

Each hydrant customer must assign a Recycled Water Site Supervisor that will receive training by CCCSD staff prior to receiving a meter and Recycled Water Use Permit. The Recycled Water Site Supervisor will be responsible for ensuring that all employees working with recycled water are trained on its proper use and that adequate signage is maintained to make employees aware that recycled water is being used.

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## Recycled Water Truck Program

To help save limited potable water supplies, EBMUD provides recycled water at no charge to trucks for construction and other non-potable purposes. The Recycled Water Truck Program supplies clean, safe, disinfected recycled water for allowed uses like dust control, soil compaction, power washing, decorative fountains, landscape irrigation and ponds, street washing, and sewer flushing. To learn about other allowable uses of recycled water please see "Recycled Water Uses Allowed in CA" below.

Recycled water for trucks is available at EBMUD's main wastewater treatment plant in West Oakland and in North Richmond. Recycled water from this program may be used **only** in EBMUD's service area. Customers interested in participating must apply for a Recycled Water Use Permit. Please:

- Apply in person, at EBMUD's New Business Office on the 1<sup>st</sup> Floor of the Administration Building, 375 11<sup>th</sup> Street, Oakland, or
- Download the form below from EBMUD's website, or
- Call the Recycled Water Truck Program Manager at (510) 287-1346 or call (510) 287-7011 to request an application form be sent to you.

Completed applications should be returned to EBMUD. You may mail, email or fax the form as noted below:

EBMUD, Recycled Water Truck Program  
 P.O. Box 24055, MS 407, Oakland, CA 94623-1055  
 Email: [mblueste@ebmud.com](mailto:mblueste@ebmud.com) or [mwest@ebmud.com](mailto:mwest@ebmud.com)  
 Fax: (510) 287-1295, Attention: Mark Bluestein

The documents below are PDF files that can be viewed and printed through Adobe Acrobat Reader, a free software.



<a href="#">Recycled Water Uses Allowed in CA</a>	47.14 KB
<a href="#">Recycled Water Truck Program Use Permit</a>	48.38 KB
<a href="#">RWTP-Certificate of Liability Insurance</a>	26.47 KB
<a href="#">RWTP-Worker's Comp Certificate</a>	21.11 KB

### Requirements

- Tank trucks must be equipped with an air gap.
- Truck owners must show proof of valid truck registration (copy for each truck must be attached to permit application).
- Truck owners must show proof of vehicle liability insurance and workers' compensation insurance. Copies of the Certificate of Liability Insurance or an ACCORD form, and the Certificate of Workers' Compensation Insurance must be attached to permit application. Photocopies, PDFs, and scanned documents are acceptable.
- Before EBMUD can fill their trucks for the first time, customers/drivers are required to attend a brief on-site training in order to learn about using the filling station and the proper handling and use of recycled water. EBMUD's Recycled Water Truck Program Manager schedules the training and informs customers of the date, time, and location.
- If a company has more than one truck driver who will use this program, all drivers must attend an on-site training, and read and sign the Recycled Water Truck Program Guidelines below.
- Once the customer/driver completes the on-site orientation and training, EBMUD will issue a signed Recycled Water Use Permit along with magnetic recycled water signs to affix to each of the customer's trucks.
- Other requirements and details about the filling stations will be reviewed at the on-site training.

<a href="#">Recycled Water Truck Program Guidelines</a>	47.88 KB
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### News

**Recycled Water FAQs for Construction & Other Workers**

See below for our Recycled Water Frequently Asked Questions for Construction & Other Workers.

**Recycled Water Truck Programs in the East Bay**

Several agencies offer recycled water through a truck/purple hydrant program in the East Bay. View list of East Bay recycled water truck programs below.

**Regulatory Approval**

The California Department of Public Health has approved this program which operates under EBMUD's existing master recycled water permit shown below. Customers must certify in the Recycled Water Truck Program permit that they have read the applicable rules and regulations in the master recycled water permit (Order 96-011) and agree to abide by them.



**TRUCK CUSTOMER FILLS HIS TANKER TRUCK WITH RECYCLED WATER.**

<a href="#">Recycled Water FAQs for Construction and Other Workers</a>	31.05 KB
<a href="#">Recycled Water Truck Programs in the East Bay</a>	26.2 KB
<a href="#">Order 96-011</a>	152.96 KB
<a href="#">Bay Area Recycled Water Commercial Truck Fill Facilities Location Guide</a>	720.99 KB

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