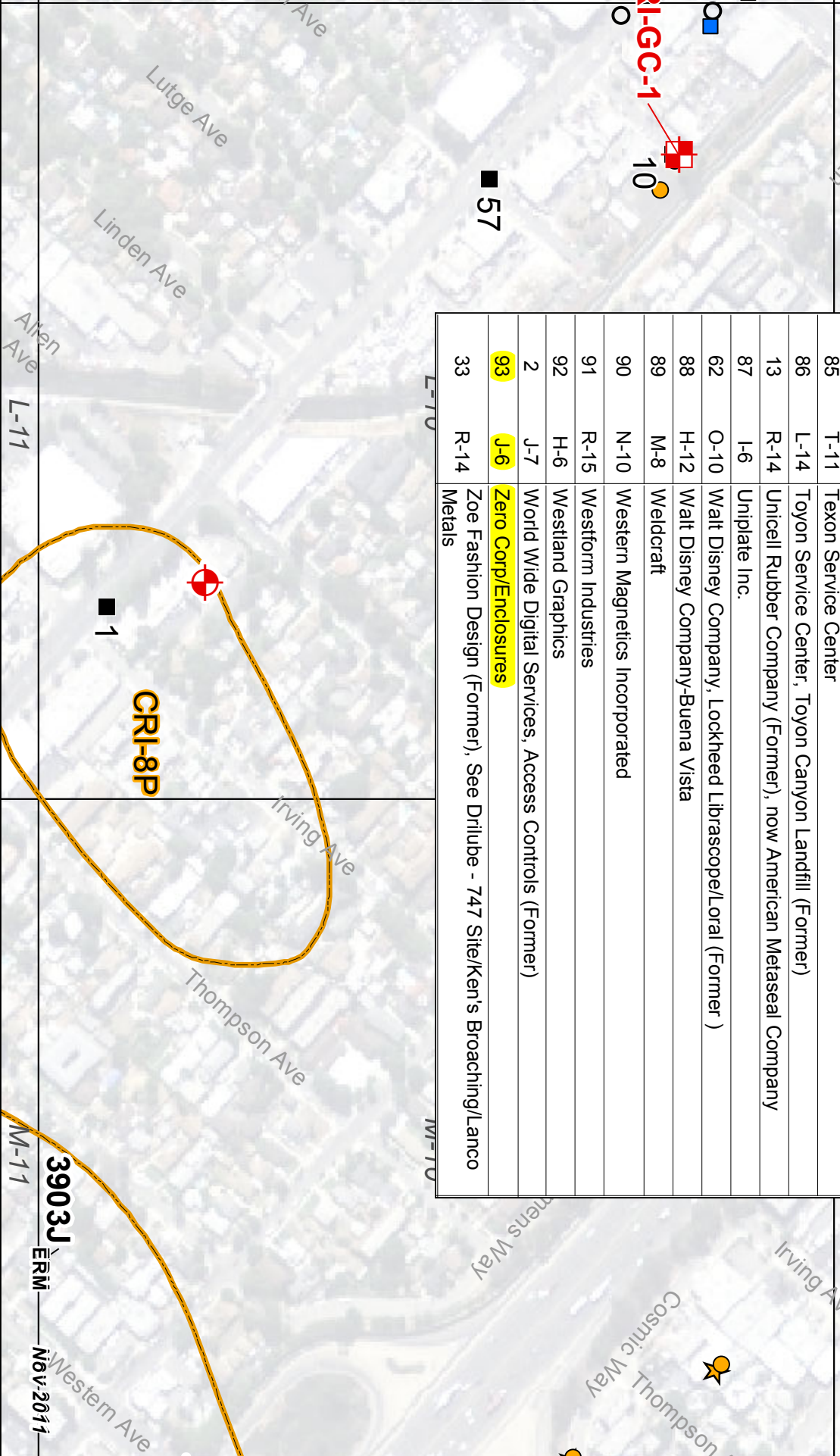


### **EXHIBIT 13**

A “zoom in” portion of said Figure 6, focusing near the right bottom of the figure and the bottom of the list of target sites. [yellow highlights added]

85	T-11	Texon Service Center
86	L-14	Toyon Service Center, Toyon Canyon Landfill (Former)
13	R-14	Unicell Rubber Company (Former), now American Metaseal Company
87	I-6	Uniplate Inc.
62	O-10	Walt Disney Company, Lockheed Librascope/Loral (Former )
88	H-12	Walt Disney Company-Buena Vista
89	M-8	Weldcraft
90	N-10	Western Magnetics Incorporated
91	R-15	Westform Industries
92	H-6	Westland Graphics
2	J-7	World Wide Digital Services, Access Controls (Former)
93	J-6	Zero Corp/Enclosures
33	R-14	Zoe Fashion Design (Former), See Drilube - 747 Site/Ken's Broaching/Lanco Metals



**CRI-8P**

1

57

10

H-GC-1

L-11

M-11

**3903J**

ERM

Nov-2011

**EXHIBIT 14**

A "zoom in portion of said Figure 6, focusing on the northerly portion of the GCOU.



## **EXHIBIT 15**

Cover page and project identification sheet, Field Sampling Plan,  
Remedial Investigation at San Fernando Valley Area 2 Superfund Site,  
Glendale Chromium Operable Unit, dated April 2012, by CH2MHILL  
[yellow highlights added]

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*FINAL*

**Field Sampling Plan  
Remedial Investigation at  
San Fernando Valley Area 2 Superfund Site  
Glendale Chromium Operable Unit**

**EPA Contract No. EP-S9-08-04  
EPA Task Order No. 060-RICO-09N2  
CH2M HILL Project No. 427727**

**Prepared for  
United States Environmental Protection Agency  
Region 9  
75 Hawthorne Street  
San Francisco, CA 94105**

April 2012

**CH2MHILL®**

6 Hutton Centre Drive  
Suite 700  
Santa Ana, California 92707

**U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 9**

Sample Plan Title: Field Sampling Plan – Remedial Investigation

Site Name: Glendale Chromium Operable Unit

Operable Unit: 04

Site Location: San Fernando Valley Area 2 Superfund Site

City/State/Zip: Glendale, Burbank, Los Angeles, California

Site EPA ID#: 09N2

Anticipated Investigation Dates: February 2012 – September 2013

Prepared By: Benjamin Lechler Date: April 2012

Agency or Firm: CH2M HILL, Inc.

Address: 6 Hutton Centre Drive, Suite 700

City/State/Zip: Santa Ana, CA 92707 Telephone: (714) 435-6283

**EPA Project Manager:** Lisa Hanusiak Section: SFD-7-3 Phone No. (415) 972-3152

FSP Approval Date: \_\_\_\_\_

\*\*\*\*\*

(for EPA use)

S U P E R F U N D	Received by Superfund Remedial Project Manager: _____	_____	S U P E R F U N D
		Date	
	Reviewed by: _____	_____	
		Date	
	APPROVED / NOT APPROVED		

\*\*\*\*\*

Expedited Review? Yes/No

Q A O	Received by Quality Assurance Office: _____	_____	Q A O
		Date	
	Reviewed by: _____	_____	
		Date	
	Approved: _____	_____	
	Manager, Quality Assurance Office, Management and Technical Services Division		
		Date	

\*\*\*\*\*

**EXHIBIT 16**

Table 3-2 (*Facilities Within Area 2 Being Investigated as Potential Sources of Chromium Contamination to Ground Water, San Fernando Valley Area 2 Superfund Site, Glendale Chromium Operable Unit*), Field Sampling Plan, Remedial Investigation at San Fernando Valley Area 2 Superfund Site, Glendale Chromium Operable Unit, dated April 2012, by CH2MHILL. [yellow highlights added]



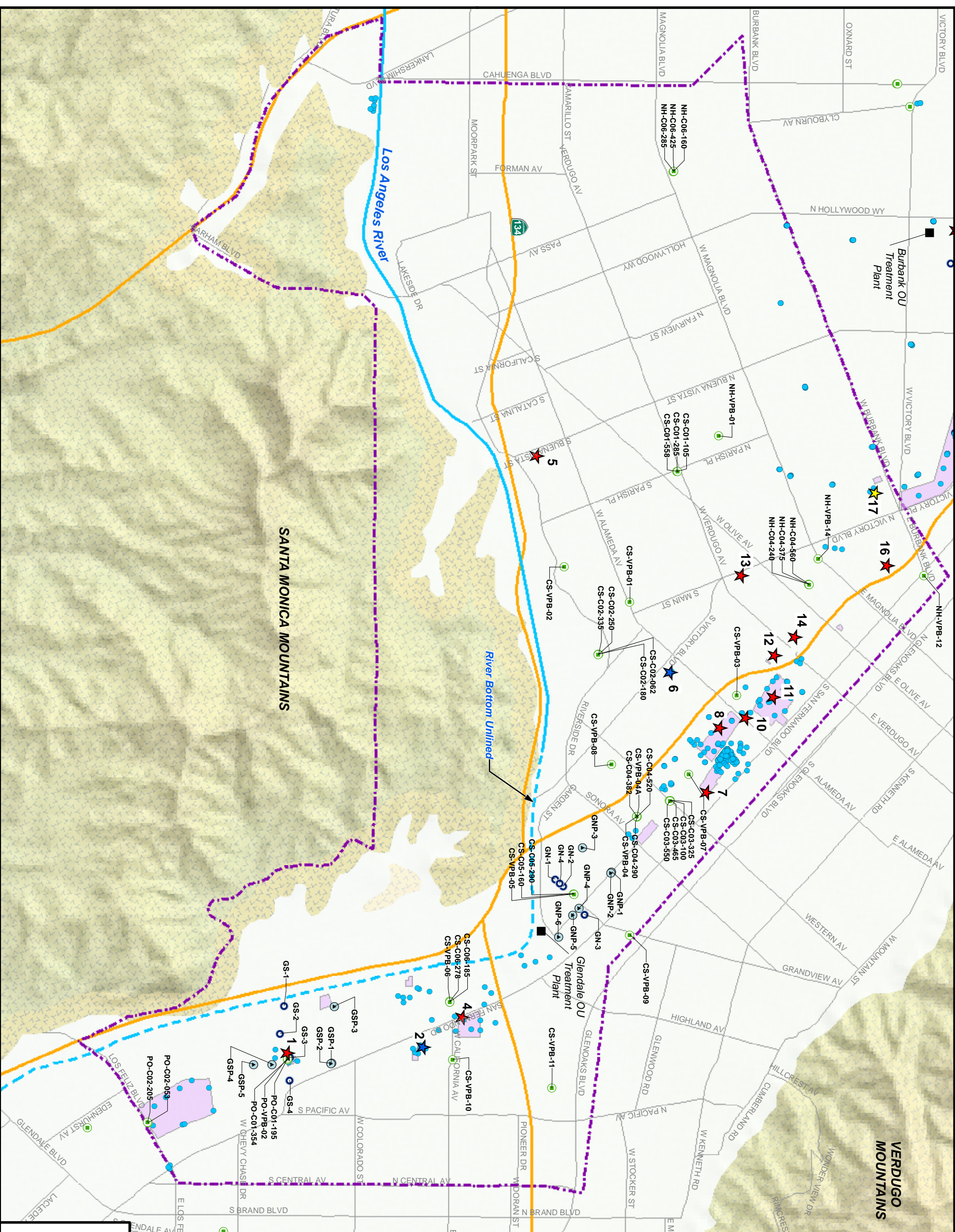
**TABLE 3-2**  
 Facilities Within Area 2 Being Investigated as Potential Sources of Chromium Contamination to Ground Water  
*San Fernando Valley Area 2 Superfund Site, Glendale Chromium Operable Unit*

Facility Name or Type	Site Number	Site Status
<b>Sites Having Received General Notice Letters from EPA</b>		
All Metals Processing	6	Removal action completed. Additional remediation on hold
Driube Company - Wilson	2	Initial removal action completed. Additional remediation pending.
Automation Plating Corp.	7	Limited soil investigation completed.
Excello Plating Co., Inc.	1	Work started on implementation of the Remedial Action Plan.
ITT Aerospace Controls (Home Depot)	8	Remedial Action Plan in place; starting implementation of the final phase of remediation.
Menasco Division (Goodrich Corporation)	11	Remedial Action Plan in place; planning underway for additional remedial action steps.
PRC-Desoto International	4	Remedial Action Plan in place; final round of in-situ remediation under way and cleanup confirmation sampling being planned.
<b>Sites Being Investigated by the RWQCB*</b>		
Former metal finishing facility	13	Initial soil investigation conducted.
Former industrial wastewater discharger	5	Initial soil investigation completed.
Former metal finishing facility	12	Shallow soil remedial action completed. Potential deep soil remediation on hold.
Former metal finishing facility	10	Planning underway for initial soil investigation.
Former heavy metal processes	14	Initial soil investigation conducted.
Former metal finishing facility	16	Planning underway of initial soil investigation.
<b>Sites Being Investigated by DTSC</b>		
Former metal finishing facility	17	Soil characterization complete.

\*The sites listed are, in general, those where active soil investigation or remediation is being overseen by the RWQCB. Numerous additional sites are also under consideration as potential sources of chromium contamination.

**EXHIBIT 17**

**FIGURE 3-2, *Location of Monitoring Wells, And Facilities Identified as Potential Chromium Sources, Glendale Chromium Operable Unit, San Fernando Valley Superfund Site, Field Sampling Plan, Remedial Investigation at San Fernando Valley Area 2 Superfund Site, Glendale Chromium Operable Unit, dated April 2012, by CH2MHILL.***



**Legend**

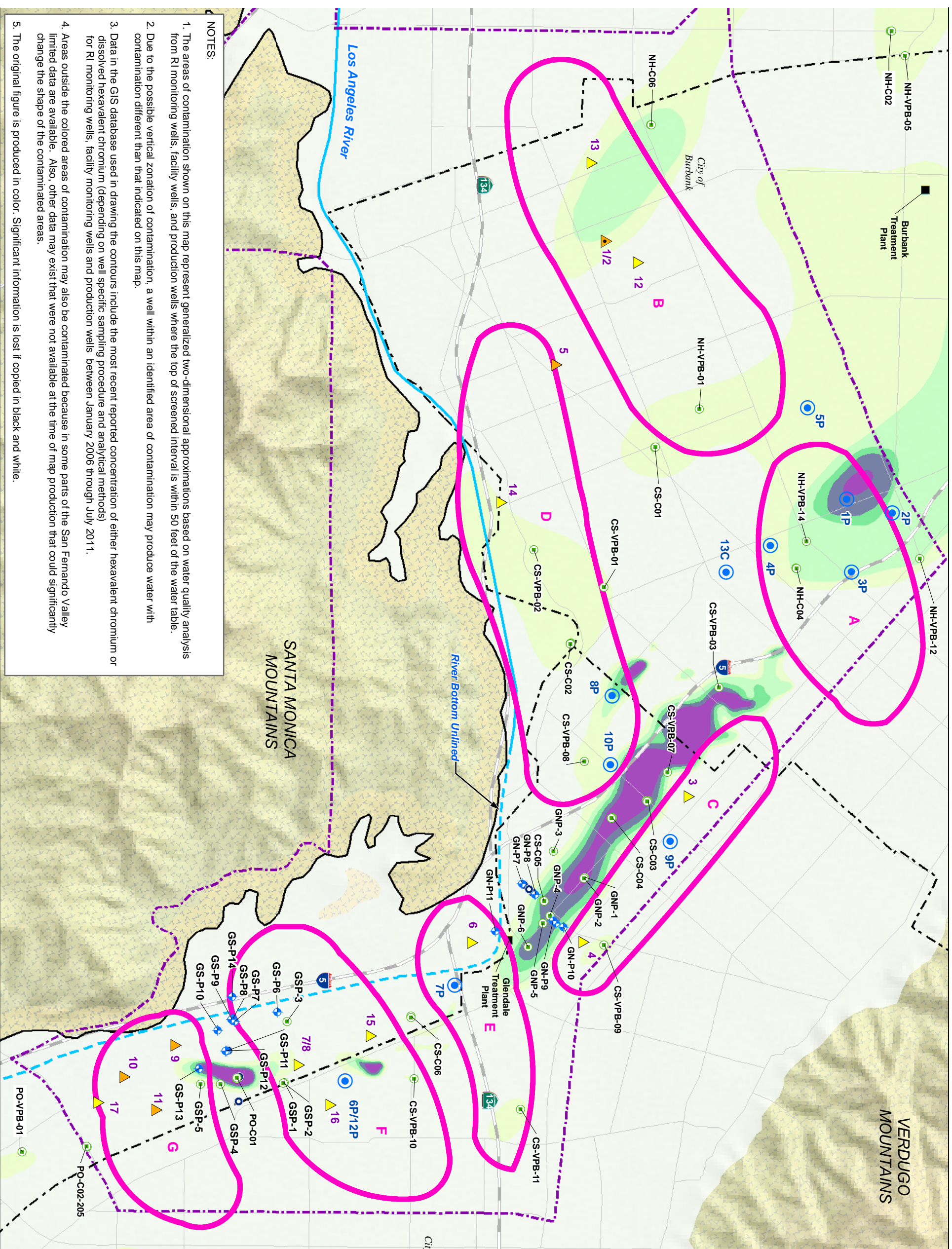
Potential Source Facility Lead Oversight Agency:

- ★ EPA
- ★ DTSC
- ★ RWQCB
- Operable Unit Extraction Well
- Facility Monitoring Well
- Existing EPA SFV RI Monitoring Well
- Piezometer
- Groundwater Treatment Plant
- Facility Boundaries
- Approximate Boundary of Investigation Area for San Fernando Valley Area 2 Superfund Site

**FIGURE 3-2**  
**LOCATION OF MONITORING WELLS AND FACILITIES IDENTIFIED AS POTENTIAL CHROMIUM SOURCES**  
 GLENDALE CHROMIUM OPERABLE UNIT  
 SAN FERNANDO VALLEY SUPERFUND SITE  
**CH2MHILL**

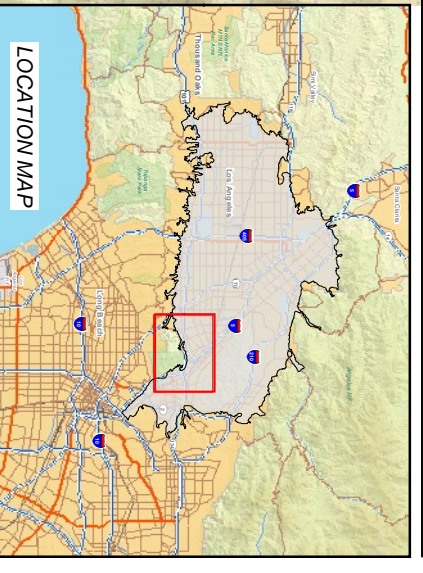
**EXHIBIT 18**

Figure 3-1, *Locations of Planned Monitoring Wells for the Remedial Investigation, Glendale Chromium Operable Unit, San Fernando Valley Superfund Sites, Field Sampling Plan, Remedial Investigation at San Fernando Valley Area 2 Superfund Site, Glendale Chromium Operable Unit, dated April 2012, by CH2MHILL.*

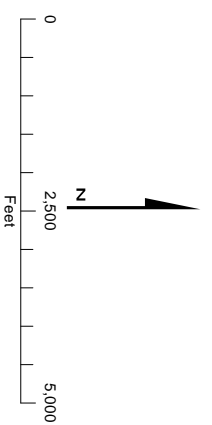


NOTES:

1. The areas of contamination shown on this map represent generalized two-dimensional approximations based on water quality analysis from RI monitoring wells, facility wells, and production wells where the top of screened interval is within 50 feet of the water table.
2. Due to the possible vertical zonation of contamination, a well within an identified area of contamination may produce water with contamination different than that indicated on this map.
3. Data in the GIS database used in drawing the contours include the most recent reported concentration of either hexavalent chromium or dissolved hexavalent chromium (depending on well specific sampling procedure and analytical methods) for RI monitoring wells, facility monitoring wells and production wells between January 2006 through July 2011.
4. Areas outside the colored areas of contamination may also be contaminated because in some parts of the San Fernando Valley limited data are available. Also, other data may exist that were not available at the time of map production that could significantly change the shape of the contaminated areas.
5. The original figure is produced in color. Significant information is lost if copied in black and white.



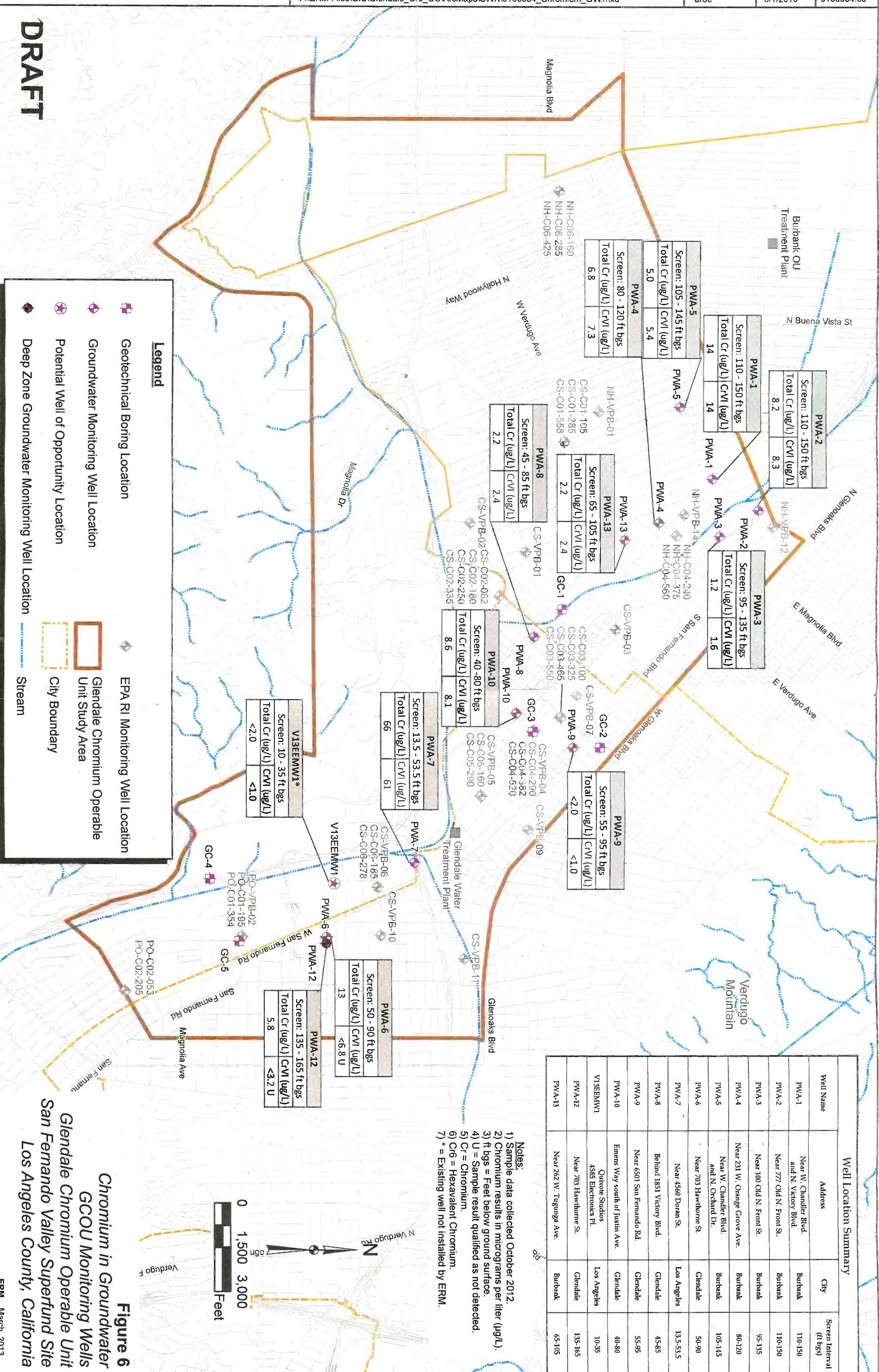
- LEGEND**
- ▲ Planned Shallow RI Monitoring Well
  - ▲ Planned Two-Well RI Monitoring Well Cluster
  - ▲ Phase 1 Installation by EPA
  - ▲ Potential RI Monitoring Well Location
  - ▲ Phase 2 Installation by EPA
  - Planned RI Monitoring Well Location
  - Phase 1 Installation by Respondents
  - Existing Monitoring Well or Well Cluster
  - New / Planned Glendale OU FFS Monitoring Well
  - Operable Unit Extraction Well
  - Operable Unit Treatment Plant
  - Municipal Boundary
  - Approximate Boundary of Glendale Investigation Areas for San Fernando Valley Superfund Sites
  - Key Areas Requiring Additional Groundwater Investigation
  - Hexavalent Chromium Concentration in the Shallow Zone (Most recent Concentration through July 2011)
  - 1-5 µg/L
  - 5-25 µg/L
  - 25-50 µg/L
  - 50-100 µg/L
  - Above 100 µg/L



**Figure 3-1**  
**Locations of Planned Monitoring Wells for the Remedial Investigation**  
 Glendale Chromium Operable Unit  
 San Fernando Valley Superfund Sites

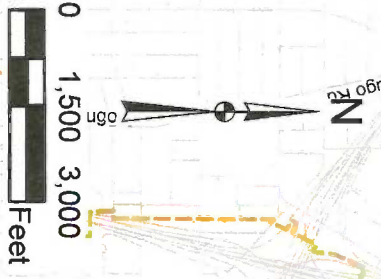
**EXHIBIT 19**

Draft Figure 6, *Chromium in Groundwater, GCOU Monitoring Wells,  
Glendale Chromium Operable Unit,  
San Fernando Valley Superfund Site, Los Angeles County, California,*  
dated March 2013, by ERM



**DRAFT**

**Figure 6**  
 Chromium in Groundwater  
 GCOU Monitoring Wells  
 San Fernando Valley Superfund Site  
 Los Angeles County, California



**EXHIBIT 20**

Five-Year Review Interview Record regarding Larry Moore and Alex Lapostol,  
Appendix C (Interview Forms), *Second Five-Year Review Report for San Fernando Valley —  
Area 2 Superfund Site, Glendale, Los Angeles County, California*, dated September 30, 2013,  
Prepared by United States Army Corps of Engineers, Seattle District, and  
Approved by U.S. EPA Region IX. [yellow highlights added]



## Five-Year Review Interview Record

**Site:** San Fernando Valley Areas 1 and 2 Superfund Sites      **EPA ID No:** CAD980894901

**Interview Type:** Visit

**Location of Visit:** Los Angeles Regional Water Quality Control Board Office

**Date:** 2/26/2013      **Time:** 3:00 PM

<b>Interviewer:</b>	ZiZi Searles David Sullivan Aaron King	<b>Title:</b>	RPM Geologist Environmental Engineer	<b>Organization:</b>	USEPA USACE USACE
---------------------	--	---------------	--	----------------------	-------------------------

### Individuals Contacted

<b>Name:</b>	Larry Moore	<b>Title:</b>	Staff Environmental Scientist	<b>Organization:</b>	Los Angeles RWQCB
<b>Telephone:</b>	(213) 576-6730	<b>Address:</b>	320 W 4th Street Suite 200 Los Angeles, CA 90013		
<b>Name:</b>	Alex Lapolstol	<b>Title:</b>	Technical Consultant	<b>Organization:</b>	E2 Consulting Engineers
<b>Telephone:</b>	(213) 576-6801	<b>Address:</b>	320 W 4th Street Suite 200 Los Angeles, CA 90013		

### Summary of Conversation

1) What is your overall impression of the project (general sentiment)?

It's a positive project; the only unfortunate thing being that it takes longer than they would like to do things. However, it is a slow process because of due process.

2) What is your current role and your agency's role with respect to the site?

RWQCB works to identify PRPs, and make sure PRPs are in compliance and responsible. Mr. Moore works as a state employee on site cleanup with an emphasis on chromium, but is still involved with VOCs. Mr. Lapolstol provides support on behalf of EPA to identify chromium PRPs (though in some cases VOCs and chromium overlap), fulfill EPA information needs, and assist the state in enforcing the water code.

3) Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding the site? If so, please give the purpose and results.

RWQCB conducts site inspections, reviews work plans, completes chemical use questionnaires from PRPs, and oversees the cleanup process. EPA provides concurrence with cleanup levels. Mr. Lapolstol is the "eyes and ears" of EPA so that EPA isn't surprised by what the RWQCB is doing.

4) Have there been any complaints, violations, or other incidents related to the site requiring a response by your office? If so, please give details of the events and the results of the responses.

There have been no public complaints, and no PRP complaints that have required a response. Glendale, Burbank, and LADWP complain about the slow pace of investigations and response times of EPA and RWQCB. PRPs complain about paying for cleanup.

5) Are you aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities? If so, please give details.

No, though residents near the former Excello plating facility admitted to trespassing and rolling around in the dirt when the facility was still operational, but that did not occur in the last five years.

6) Is the remedy functioning as expected? How well is the remedy performing?

For the NHOU, EPA has spent lots of money on the remedy, but unless LADWP uses appropriate pumping rates, it's a moot point; they're just spreading contamination around. It is difficult to contain plumes the way the remedy has been operated. For the GOU, PCE, TCE, total chromium, and hexavalent chromium have been found down gradient of GS-3. The characterization of the GOU is insufficient. Part of the plume has gone off-site of the Excello facility.

7) What does the monitoring data show? Are there any trends that show contaminant levels are decreasing?

The BOU has not been completely assessed in regard to chromium. Honeywell (NHOU) has been remediating an on-site source by injecting calcium polysulfide, and has been seeing reductions in off-site wells. Decreasing chromium concentrations have not been observed in the GOU; the plume appears to be shifting, rather than decreasing in concentrations.

8) Is there a continuous on-site O&M presence? If so, please describe staff and activities. If there is not a continuous on-site presence, describe staff and frequency of site inspection and activities.

RWQB has no day-to-day interactions with facilities, but receives monthly updates from the GOU.

9) What are the annual O&M costs for your organization's involvement at the site?

N/A

10) Have there been any significant changes in the O&M requirements, maintenance schedules, or sampling routines since start-up or in the last five years? If so, do they affect the protectiveness of the remedy? Please describe changes and impacts.

N/A

11) Have there been unexpected O&M difficulties or costs at the site since start-up or in the last five years? If so, please give details.

N/A

12) Have there been opportunities to optimize O&M or sampling efforts? Please describe changes and resultant or desired cost savings or improved efficiency.

N/A

13) What effects have site operations had on the surrounding community?

For example, the BOU is pumping their own water, meaning they don't have to purchase all of their water from the Metropolitan Water District. The water is clean, and no one sees the plant; it's a great benefit. In general, the public is interested. If the site has a Cleanup and Abatement Order, the PRP must do community outreach before RWQCB will issue a closure.

14) Are you aware of any community concerns regarding the site or its operation and administration? If so, please summarize the concerns.

Nothing to add; refer to response to question 13.

15) Do you feel well informed about the site's activities and progress?

Yes. **The updates and contact with EPA are sufficient.**

16) Are you aware of any changes in Federal/State/County/Local laws and regulations that may impact the protectiveness of the site?

OEHHA developed a PHG for hexavalent chromium, which is the precursor for development of an MCL. This will result in higher costs for treatment facilities, which will be passed on to consumers.

17) Do you have any comments, suggestions, or recommendations regarding the site's management, operation, or any other aspects of the site?

No.

**EXHIBIT 21**

Five-Year Review Interview Record regarding Tedd Yargeau, Appendix C (Interview Forms),  
*Second Five-Year Review Report for San Fernando Valley — Area 2 Superfund Site,*  
*Glendale, Los Angeles County, California,* dated September 30, 2013,  
Prepared by United States Army Corps of Engineers, Seattle District, and  
Approved by U.S. EPA Region IX.  
[yellow highlights added]

## Five-Year Review Interview Record

<b>Site:</b> San Fernando Valley Area 1 and Area 2 Superfund Sites	<b>EPA ID No:</b> CAD980894893
--	--------------------------------

**Interview Type:** Phone

**Location of Visit:** N/A

**Date:** 5/6/2013    **Time:** 11:00 AM

<b>Interviewer:</b> ZIZI Searles	<b>Title:</b> RPM	<b>Organization:</b> USEPA
Aaron King	Environmental Engineer	USACE

### Individuals Contacted

<b>Name:</b> Tedd Yargeau	<b>Title:</b> Senior Scientist	<b>Organization:</b> DTSC
<b>Telephone:</b> (818) 212-5340	<b>Address:</b> 9211 Oakdale Avenue Chatsworth, CA 91311	

### Summary of Conversation

1) What is your overall impression of the project (general sentiment)?

Overall, the projects are very good. Things are moving forward with the GCOU and things are going well with the BOU. There have been some issues in the NHOU with bringing in other responsible parties.

2) What is your current role and your agency's role with respect to the site?

Peer-reviewing documents. DTSC ensures that the state's interests are represented.

3) Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding the site? If so, please give the purpose and results.

There have been no recent site visits, though DTSC is well aware of what is going on due to communications from EPA and PRPs.

4) Have there been any complaints, violations, or other incidents related to the site requiring a response by your office? If so, please give details of the events and the results of the responses.

No.

5) Are you aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities? If so, please give details.

No.

6) Is the remedy functioning as expected? How well is the remedy performing?

The remedies are functioning for the most part with the exception of the NHOU (regarding containment). However, all of the remedies are headed in the right direction.

7) What does the monitoring data show? Are there any trends that show contaminant levels are decreasing?

Contaminant levels are definitely decreasing, except for hexavalent chromium in some wells in the NHOU.

8) Is there a continuous on-site O&M presence? If so, please describe staff and activities; if there is not a continuous on-site presence, describe staff and frequency of site inspection and activities.

There is no oversight on behalf of the state but DTSC is aware of EPA's oversight.

9) What are the annual O&M costs for your organization's involvement at the site?

N/A

10) Have there been any significant changes in the O&M requirements, maintenance schedules, or sampling routines since start-up or in the last five years? If so, do they affect the protectiveness of the remedy? Please describe changes and impacts.

The only new thing is the new and emerging compounds, especially hexavalent chromium. The second remedy for the NHOU will treat for hexavalent chromium, and the GOU is actively working on a chromium remedy.

11) Have there been unexpected O&M difficulties or costs at the site since start-up or in the last five years? If so, please give details.

Bringing more PRPs on board has been a challenge in the NHOU.

12) Have there been opportunities to optimize O&M or sampling efforts? Please describe changes and resultant or desired cost savings or improved efficiency.

EPA has been trying to be more efficient in sampling by reducing the number of mobilizations.

13) What effects have site operations had on the surrounding community?

DTSC has not heard any complaints; EPA has been running a great outreach program.

14) Are you aware of any community concerns regarding the site or its operation and administration? If so, please summarize the concerns.

There was a recent inquiry regarding a real estate purchase in the San Fernando Valley and whether the presence of the contamination could affect the value of the property. DTSC responded that property values would not be affected.

15) Do you feel well informed about the site's activities and progress?

Yes. EPA has actively notified DTSC.

16) Are you aware of any changes in Federal/State/County/Local laws and regulations that may impact the protectiveness of the site?

The MCL for hexavalent chromium may impact protectiveness, and the challenge has been how to address it. EPA has moved in the right direction, and technologies are being tested that could treat hexavalent chromium down to what the MCL might be.

17) Do you have any comments, suggestions, or recommendations regarding the site's management, operation, or any other aspects of the site?

No. EPA has done a very good job at managing a complex project, and DTSC certainly appreciates it.

**EXHIBIT 22**

Emails, dated February 27, 2013, between Alex Lapostol and Donald C. Nanney.  
[yellow highlights added]

**From:** [Alex.Lapostol@CH2M.com](mailto:Alex.Lapostol@CH2M.com) [<mailto:Alex.Lapostol@CH2M.com>]  
**Sent:** Wednesday, February 27, 2013 1:57 PM  
**To:** Don Nanney  
**Cc:** [ESmalstig@Geosyntec.com](mailto:ESmalstig@Geosyntec.com); [lmoore@waterboards.ca.gov](mailto:lmoore@waterboards.ca.gov)  
**Subject:** RE: Former Zero Halliburton Site

Hi Don, good to hear from you. Interesting about EPA. However, I want to say respectfully, that is not relevant what EPA counsel opines about the situation...since this is strictly a Regional Board investigation. It was serendipity perhaps that when I was travelling last week, I saw a guy at the airport with one of those cool Zero Halliburton brief cases (anodized aluminum - see attached jpeg).....Looking into the Zero-Halliburton relationship would be a great idea in my opinion. The thing is that the Board is not going to let this go..for the reasons previously stated about relative soil concentrations and occurrence....and the fact that this site was one of the biggest anodizing sites in the area.

Best Regards,  
Alex Lapostol, P.G.  
Senior Technical Consultant  
E2 Consulting Engineers - USEPA Contractor  
213-576-6801 (Regional Board office)  
510-590-6218 (cell)

---

**From:** Don Nanney [[dnanney@gilchristutter.com](mailto:dnanney@gilchristutter.com)]  
**Sent:** Wednesday, February 27, 2013 11:50  
**To:** Lapostol, Alex/BAO  
**Cc:** [ESmalstig@Geosyntec.com](mailto:ESmalstig@Geosyntec.com); [lmoore@waterboards.ca.gov](mailto:lmoore@waterboards.ca.gov)  
**Subject:** Re: Former Zero Halliburton Site

Hi, Alex. Doing well, thanks. Hope you are too.

Coincidentally, a couple days ago, I was finally able to have a substantive discussion with Thomas Butler, counsel at US EPA Region 9 (as I had mentioned to you I may do). Given the circumstances and the extremely low data, he didn't think that they have any interest in the site (or need for more data) in connection with the Chromium Operable Unit. At his request, I sent him yesterday the soil data tables and figures (historical and recent) for Cr and Cr6 and I expect to have confirmation from him soon. To the extent his confirmation may be of assistance, I think we should wait a bit for that and I'll let you know what he says for EPA as soon as I hear and we can confer about how to proceed. And, of course, my client will need to make a decision and we want to know what Mr. Butler will confirm.

By the way, I am not sure where Halliburton comes from in your subject line. If only they were involved they could take care of this! Have you found out something about that?

Best,

Don Nanney

Sent from my iPhone

On Feb 27, 2013, at 11:04 AM, "[Alex.Lapostol@CH2M.com](mailto:Alex.Lapostol@CH2M.com)" <[Alex.Lapostol@CH2M.com](mailto:Alex.Lapostol@CH2M.com)> wrote:

Hi Don, Hope you are well. Please let me know the status of your clients compliance posture....how does that sound ? i.e. please let me know whats up, with the issue we talked about and the additional soil boring in that clarifier "no. 4".

Regards,  
Alex Lapostol, P.G.  
Senior Technical Consultant  
E2 Consulting Engineers - USEPA Contractor  
213-576-6801 (Regional Board office)  
510-590-6218 (cell)



1 DONALD C. NANNEY  
State Bar No. 62235  
2 GILCHRIST & RUTTER  
Professional Corporation  
3 1299 Ocean Avenue, Suite 900  
Santa Monica, California 90401-1000  
4 Telephone: (310) 393-4000  
Facsimile: (310) 394-4700  
5 Email: [Dnanney@gilchristutter.com](mailto:Dnanney@gilchristutter.com)  
6 Attorneys for Petitioner  
Northridge Properties, LLC  
7  
8

9 STATE OF CALIFORNIA

10 STATE WATER RESOURCES CONTROL BOARD

11 In the Matter of Los Angeles Regional Water  
12 Quality Control Board 13267 Order –  
Northridge Properties, LLC, former Zero  
13 Corporation Facility, 777 North Front Street,  
Burbank, California

No.

**DECLARATION OF DONALD C.  
NANNEY IN SUPPORT OF  
SECOND PETITION FOR REVIEW,  
REQUEST FOR HEARING AND  
REQUEST FOR STAY  
("NANNEY DEC. #2")**

14  
15  
16  
17 I, Donald C. Nanney, declare as follows:

18 1. I am an attorney at law licensed to practice before all courts of the State of  
19 California and a Partner of Gilchrist & Rutter Professional Corporation, counsel for Petitioner  
20 Northridge Properties, LLC ("Northridge Properties" or "Petitioner"). I have personal knowledge  
21 of the facts set forth herein and if called upon as a witness could and would testify competently  
22 thereto. I file this declaration in support of the Petition for Review, Request for Hearing and  
23 Request for Stay (the "Second Petition") submitted herewith. This declaration focuses on the  
24 Request for Stay. Other declarations submitted herewith focus on other aspects of this matter.

25 2. The Second Petition responds to the Requirement for Technical Reports Pursuant to  
26 California Water Code Section 13267 Order, Former ZERO Corporation Facility (the "Second  
27 Order"), dated August 6, 2014, issued by the Los Angeles Regional Water Quality Control Board  
28 ("RWQCB" or "Regional Board") to Northridge Properties, a true and correct copy of which is

1 attached as Exhibit 2 to the accompanying Declaration of Donald C. Nanney in Support of Second  
2 Petition For Review (“Nanney Dec. #1).

3 3. Without the requested stay, Petitioner will be put in a position where it will have to  
4 comply with the requirements contained in the Second Order or face the possibility of  
5 administrative sanctions, notwithstanding good grounds for objection to the Second Order. We  
6 have been in this position before.

7 4. The Regional Board issued the Requirement for Technical Reports Pursuant to  
8 California Water Code Section 13267 Order, Former ZERO Corporation Facility, dated May 10,  
9 2011, to Northridge Properties (the “Initial Order”). The Initial Order was the subject of the  
10 Petition for Review, Request for Hearing and Request for Stay, In the Matter of Los Angeles  
11 Regional Water Quality Control Board 13267 Order – Northridge Properties, LLC, former Zero  
12 Corporation Facility, 777 North Front Street, Burbank, California, dated June 9, 2011, Petition No.  
13 A2167 (the “Initial Petition”). The Initial Petition essentially took the position that the Initial  
14 Order was invalid for lack of permissible and sufficient grounds for reopening the site that had  
15 been closed by the Regional Board pursuant to the Certificate of Completion, dated June 30, 2002,  
16 issued under cover letter dated July 1, 2002, to APW North America, Inc. (i.e., the responsible  
17 party, successor of Zero Corporation). In order to reduce the volume and burden of this  
18 submission, we will not include copies of the Certificate of Completion, the Initial Order or the  
19 Initial Petition as exhibits. The Initial Petition, which includes the Initial Order and the Certificate  
20 of Completion as exhibits, is on file with the State Board and is readily available for electronic  
21 download from the State Water Resources Control Board’s webpage at this link:

22 [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality/docs/petitions/a2167petition.pdf](http://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/petitions/a2167petition.pdf)  
23

24 5. No stay was received in response to the Initial Petition; no notice was issued to the  
25 Regional Board and other interested persons to file a response to the Initial Petition; no hearing  
26 was held. The Initial Petition remains pending on file, without action by the State Board,  
27 languishing in administrative purgatory.

28 6. For lack of a stay, it was necessary for Petitioner to comply with the Initial Order in

1 order to avoid potential penalties for non-compliance. Petitioner has suffered and continues to  
2 suffer the adverse consequences that are particularly unjust where Petitioner rightly expected to be  
3 protected as an innocent purchaser (with a Covenant Not to Sue and a Certificate of Completion)  
4 against this kind of expense and damage.

5 7. As happened with the Initial Petition, without a stay, Petitioner would be required  
6 to engage consultants, draft and submit a workplan and subsequently to perform the work  
7 specified in the workplan. The engagement of consultants and drafting of the workplan and the  
8 subsequent work and report would involve substantial costs that would have to be incurred prior to  
9 resolution of the requested review. Without a stay in the interim, Petitioner would again suffer  
10 irreparable injury that would not be cured by a subsequent hearing and grant of relief.

11 8. In a telephone discussion on August 11, 2014, soon after the issuance of the Second  
12 Order, Alex Lapostol (US EPA Contractor attached to the Regional Board) informed me in no  
13 uncertain terms that the required additional investigation is “non-negotiable.” Faced with that  
14 response and faced with the costs that would have to be incurred soon to meet the deadline under  
15 the Second Order, Petitioner has no choice but to request that the State Board immediately stay the  
16 Second Order pending review of the merits.

17 9. There is a real due process problem with the timing of State Board review of  
18 petitions. Under the current regulations, if the State Board neither dismisses a petition nor notifies  
19 other parties to respond to the petition, the petition simply remains pending without time limit as  
20 to whether and when the administrative remedy would be exhausted. Petitions can and do  
21 languish for months and years (case in point, our Initial Petition). Given the short time deadlines  
22 on many Regional Board orders, the lack of prompt review or stays from the State Board results in  
23 denial of administrative review and forces compliance notwithstanding the merits and grounds for  
24 objecting to an order. This is truly an example of “justice delayed is justice denied.”

25 10. This intolerable situation has been recognized, and a partial solution is in the works  
26 at the State Board. Attached as Exhibit 1 is a true and correct copy of pending regulatory  
27 amendments by the State Board (under a Notice of Proposed Rulemaking dated February 2014),  
28 with respect to 23 CCR §§ 2050 et seq. The amendments, if adopted, would require the State

1 Board to initiate the notification process within 90 days, or a petition would be deemed denied as  
2 of the 91<sup>st</sup> day following receipt of the petition (longer periods would apply before deemed denial  
3 in the case of petitions already filed before the effective date of the amendment).

4 11. While that amendment would be an improvement over the existing regulation, it  
5 would not do enough to provide due process in situations where the State Board still need not act  
6 and the deemed denial under the pending amendment would not apply until after the compliance  
7 deadline.

8 12. For example, in this case, the compliance deadline under the Second Order is  
9 October 15, 2014, so that the 90 days that would be allowed for the State Board to act under the  
10 new regulation (assuming it were in effect) would still not avoid the problem where the Regional  
11 Board's order was dated August 6, 2014, with compliance deadline in less than 90 days (to say  
12 nothing of the fact that the 90 days would not start running until a petition is filed).

13 13. Thus, the amendment, if adopted, would not solve this kind of timing problem.  
14 There is, however, a way for the State Board to provide more effective administrative review,  
15 which is promptly to grant stays in cases like this one.

16 14. The requested stay will pose no substantial harm to the public or water quality, but  
17 instead will simply maintain the status quo pending a decision on the merits. The status quo is  
18 quite benign, as shown in the Second Petition and in the supporting declaration of Eric Smalstig  
19 (as well in the Initial Petition). Indeed from all the available data – including the 2009 CalTrans  
20 report and subsequent data from study by Geosyntec Consultants – the property meets applicable  
21 industrial standards and even residential standards regarding chromium and Cr6, and the single  
22 finding of Cr6 leading to the Second Order is at a barely detectable concentration. Therefore,  
23 there would clearly be no substantial harm to the public or water quality by maintaining the status  
24 quo pending review.

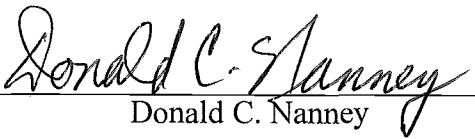
25 15. As discussed in the Initial Petition (and supplemented in the Second Petition and  
26 supporting declarations), there is clearly substantial question as to the validity of the Initial Order  
27 and the Second Order given the binding legal effect of the Certificate of Completion and of the  
28 Covenant Not to Sue, and there is clearly substantial question as to the sufficiency of the alleged

1 factual basis for the asserted reopener and issuance of the Initial Order and the additional  
2 requirements of the Second Order.

3 16. Accordingly, the State Board should grant the requested stay of the Second Order  
4 pending hearing on the merits. The State Board is requested to advise as soon as possible whether  
5 the stay is granted, in light of the compliance deadline of October 15, 2014, under the Second  
6 Order.

7 I declare under penalty of perjury under the laws of the State of California that the  
8 foregoing is true and correct.

9 Executed this 26 day of August, 2014, at Santa Monica, California.

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12 Donald C. Nanney

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**Exhibit 1**  
**Proposed Amendment of 23 CCR §§ 2050 et seq.,**  
**under a Notice of Proposed Rulemaking, dated February 2014,**  
**Regarding**  
**RULES GOVERNING REVIEW BY STATE BOARD OF ACTION OR**  
**FAILURE TO ACT BY REGIONAL BOARD**

CALIFORNIA CODE OF REGULATIONS  
TITLE 23. WATERS  
DIVISION 3. STATE WATER RESOURCES CONTROL BOARD  
CHAPTER 6. REVIEW BY STATE BOARD OF ACTION OR FAILURE  
TO ACT BY REGIONAL BOARD

**§ 2050. Petition for Review by State Board.**

(a) Any petition by an aggrieved person to the state board for review under Water Code Section 13320(a) of an action or failure to act by a regional board shall be submitted in writing and received by the state board within 30 days of any action or failure to act by a regional board. The petition shall contain the following:

- (1) Name, address, telephone number and email address (if available) of the petitioner.
- (2) The specific action or inaction of the regional board which the state board is requested to review and a copy of any order or resolution of the regional board which is referred to in the petition, if available. If the order or resolution of the regional board is not available, a statement shall be included giving the reason(s) for not including the order or resolution.
- (3) The date on which the regional board acted or refused to act or on which the regional board was requested to act.
- (4) A full and complete statement of the reasons the action or failure to act was inappropriate or improper.
- (5) The manner in which the petitioner is aggrieved.
- (6) The specific action by the state or regional board which petitioner requests.
- (7) A statement of points and authorities in support of legal issues raised in the petition, including citations to documents or the transcript of the regional board hearing ~~where appropriate~~ **if it is available.**
- (8) A statement that the petition has been sent to the appropriate regional board and to the discharger, if not the petitioner.
- (9) A statement that the substantive issues or objections raised in the petition were raised before the regional board, or an explanation of why the petitioner was not required or was unable to raise these substantive issues or objections before the regional board.

(b) Service of a petition may be made by U.S. mail, by hand delivery, by facsimile with hard copy to follow, or via e-mail ~~by prior arrangement to~~ **waterqualitypetition@waterboards.ca.gov.** [In the case of service by facsimile, only the petition itself shall be sent. All exhibits shall be included with the hard copy.] The petition must be received by the state board no later than 5:00 p.m. 30 days following the date of the action or inaction by the regional board, except that if the thirtieth day following the date of the action or inaction falls on a Saturday, Sunday, or state holiday, the petition must be received by the state board no later than 5:00 p.m. on the first business day following.

(c) If the action or inaction that is the subject of the petition was taken by the regional board after notice and opportunity to comment, the petition to the state board shall be limited to those substantive issues or objections that were raised before the regional board.

**(d) The state board shall notify the petitioner of the assigned petition number and the date the state board received the petition.**

Note: Authority cited: Section 1058, Water Code. Reference: Section 13320, Water Code.

**§ 2050.5. Complete Petitions; Responses; Time Limits.**

(a) Upon receipt of a petition that complies with section 2050 the state board may either dismiss the petition pursuant to section 2052, or may provide written notification to the petitioner, informing the discharger (if not the petitioner), the regional board, and other interested persons that they shall have 30 days from the date of mailing such notification to file a response to the petition with the state board. The regional board shall file the administrative record within this 30-day period, including a copy of the tape recording of the regional board action, or a transcript, if available. Responses to petitions and any other submissions shall be served concurrently upon the petitioner, the discharger (if not the petitioner) and the regional board, by any method listed in section 2050, **subdivision** (b). Any points and authorities filed in response

to the petition shall include citations to documents or the transcript of the regional board hearing where appropriate. The time for filing a response or the administrative record may be extended by the state board. Additional submissions will be allowed only upon written request and at the discretion of the state board.

(b) The state board shall review and act on the petition within 270 days from the date of mailing the notification described in subdivision (a), unless a hearing is held by the state board. If a hearing is held, the state board shall act on the petition within 330 days from the date of mailing the notification described in subdivision (a), or within 120 days of the close of the hearing, whichever is later. If formal disposition is not made by the state board within these time limits the petition is deemed denied. These time limits may be extended for a period not to exceed 60 days with written agreement from the petitioner. The time limits for formal disposition do not apply while action on a petition is held in abeyance, as provided in ~~section 2050.5~~ subdivision (d).

(c) The state board may, on its motion, review a regional board's action or failure to act for any reason, including lack of formal disposition by the state board within the time limits provided in subdivision (b).

(d) A petition may be held in abeyance at the request or with the agreement of the petitioner.

(1) A request or agreement to hold a petition in abeyance must be in writing and shall be provided to the state board, the regional board, and the discharger, if not the petitioner.

(2) Petitions may be held in abeyance unless the regional board provides reasonable grounds for objection. For petitions challenging the assessment of administrative civil liability or penalties, written agreement from the regional board is required.

(3) The time limits for formal disposition and for filing a response to the petition and the administrative record shall be tolled during the time a petition is held in abeyance, and shall recommence running when the petition is removed from abeyance.

**(e) Unless a petition is being held in abeyance pursuant to subdivision (d), the state board shall issue the notification described in subdivision (a) within 90 days of receipt of a petition for review, as indicated in the notice provided pursuant to subdivision (d) of section 2050. If the state board has not provided the notification described in subdivision (a) within the 90-day period provided by this subdivision, the state board deems the petition dismissed by operation of law effective the 91<sup>st</sup> day following receipt of the petition. The time limit for providing the notification described in subdivision (a) shall be tolled during the time a petition is held in abeyance, and shall recommence running when the petition is removed from abeyance. A party aggrieved by a regional board final decision or order for which the state board dismisses a petition pursuant to this subdivision must file any judicial challenge within the 30-day period for judicial review allowed by Water Code section 13330, subdivision (b).**

**(f) For petitions received by the state board before the effective date of subdivision (e) that are not being held in abeyance and for which the state board has not issued the notification described in subdivision (a), the time limit for providing the notification described in subdivision (a) shall be as follows:**

**(1) For petitions received before January 1, 2011, within 120 days of the effective date of subdivision (e).**

**(2) For petitions received from January 1, 2011 to December 31, 2012, within 240 days of the effective date of subdivision (e).**

**(3) For petitions received from January 1, 2013 to the day before the effective date of subdivision (e), within one year of the effective date of subdivision (e).**

**(g) If the state board has not provided the notification described in subdivision (a) within the periods specified in subdivision (f)(1) through (f)(3), the state board deems the petition dismissed by operation of law effective the day following the respective period described in subdivision (f)(1) through (f)(3). The time limit for providing the notification described in subdivision (a) shall be tolled during the time a petition is held in abeyance, and shall recommence running when the petition is removed from abeyance. A party aggrieved by a regional board final decision or order for which the state board dismisses a petition pursuant to this subdivision must file any judicial challenge within the 30-day period for judicial review allowed by Water Code section 13330, subdivision (b).**

Note: Authority cited: Section 1058, Water Code. Reference: Section 13320, Water Code.



**§ 2051. Defective Petitions.**

(a) Upon receipt of a petition that does not comply with Section 2050, the state board shall notify the petitioner of the manner in which the petition is defective and the time within which an amended petition may be filed, unless the petition is dismissed pursuant to section 2052.

(b) If a properly amended petition is not received by the state board within the time allowed, the petition shall be ~~dismissed~~ **deemed withdrawn** unless cause is shown for an extension of time.

Note: Authority cited: Section 1058, Water Code. Reference: Section 13320, Water Code.

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Santa Monica, California 90401-1000  
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Facsimile: (310) 394-4700  
5 Email: [Dnanney@gilchristutter.com](mailto:Dnanney@gilchristutter.com)  
6 Attorneys for Petitioner  
Northridge Properties, LLC  
7  
8

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

9  
10  
11 In the Matter of Los Angeles Regional Water  
12 Quality Control Board 13267 Order –  
Northridge Properties, LLC, former Zero  
13 Corporation Facility, 777 North Front Street,  
Burbank, California

No.

**DECLARATION OF DONALD C.  
NANNEY IN SUPPORT OF SECOND  
PETITION FOR REVIEW, REQUEST  
FOR HEARING AND REQUEST FOR  
STAY (“NANNEY DEC. # 3)**

14  
15  
16 I, Donald C. Nanney, declare as follows:

17 1. I am an attorney at law licensed to practice before all courts of the State of  
18 California and a Partner of Gilchrist & Rutter Professional Corporation, counsel for Petitioner  
19 Northridge Properties, LLC (“Northridge Properties”). I have personal knowledge of the facts set  
20 forth herein and if called upon as a witness could and would testify competently thereto. I file this  
21 declaration in support of the Petition for Review, Request for Hearing and Request for Stay (the  
22 “Second Petition”) submitted herewith, and to supplement the Initial Petition (defined below).  
23 This declaration provides a response to a contention informally raised by agency staff. Other  
24 declarations submitted herewith focus on other aspects of this matter.

25 2. The Los Angeles Regional Water Quality Control Board (“Regional Board”) issued  
26 the Requirement for Technical Reports Pursuant to California Water Code Section 13267 Order,  
27 Former ZERO Corporation Facility, dated May 10, 2011, to Northridge Properties (the “Initial  
28 Order”). The Initial Order was the subject of the Petition for Review, Request for Hearing and

1 Request for Stay, In the Matter of Los Angeles Regional Water Quality Control Board 13267  
2 Order – Northridge Properties, LLC, former Zero Corporation Facility, 777 North Front Street,  
3 Burbank, California, dated June 9, 2011, Petition No. A2167 (the “Initial Petition”). The Initial  
4 Petition essentially took the position that the Initial Order was invalid for lack of permissible and  
5 sufficient grounds for reopening the site that had been closed by the Regional Board pursuant to  
6 the Certificate of Completion, dated June 30, 2002, issued under cover letter dated July 1, 2002, to  
7 APW North America, Inc. (i.e., the responsible party, successor of Zero Corporation). In order to  
8 reduce the volume and burden of this submission, we will not include copies of the Certificate of  
9 Completion, the Initial Order or the Initial Petition as exhibits. The Initial Petition, which includes  
10 the Initial Order and the Certificate of Completion as exhibits, is already on file at the State Water  
11 Resources Control Board (“State Board”) and is readily available for electronic download from the  
12 State Board’s webpage at this link:

13 [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality/docs/petitions/a2167petition.pdf](http://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/petitions/a2167petition.pdf)  
14

15 3. No stay was received in response to the Initial Petition, no notice was issued to the  
16 Regional Board and other interested persons to file a response to the Initial Petition, no hearing  
17 was held, and the Initial Petition remains pending on file without action by the State Board.

18 4. Some time after the Initial Petition was filed, it was contended by agency staff in  
19 informal discussions that the Regional Board (as the designated administering agency for the  
20 Former Zero Facility under the Unified Agency Review of Hazardous Materials Release Sites law,  
21 under an application mentioning VOCs) only had jurisdiction to review and close the site with  
22 respect to VOCs, and therefore (i) the Certificate of Completion mentioned, and could only cover,  
23 VOCs, and (ii) the site was not closed by the Regional Board with respect to chromium (including  
24 Cr6). That contention is absurd.

25 5. I was present at meetings with Regional Board staff during the time when the final  
26 investigations and review were being required by the staff and done by consultants for the  
27 responsible party, leading up to the issuance of the Certificate of Completion in 2002. Those final  
28 investigations and review covered chromium, 1-4 dioxane and MTBE in addition to VOCs, to the

1 satisfaction of the Regional Board, as detailed in the Initial Petition.

2           6.       Consider this scenario suggested by the contention: In those meetings, when  
3 Regional Board staff members, Dr. Arthur Heath and Elijah Hill, required additional study of  
4 emerging chemicals, including chromium, before closure would be granted, Michael Francis,  
5 counsel for the responsible party, could have responded: “But, Art and Elijah, you don’t have  
6 jurisdiction to require those additional studies. My application on behalf of Zero Corporation for  
7 site designation only mentioned VOC releases. The Regional Board’s jurisdiction is therefore  
8 limited to VOCs.” Mr. Francis would have been laughed out of the room for absurdity.

9           7.       No such limitation is contained in the California Environmental Protection Agency  
10 Site Designation Committee Resolution No. 97-19, February 5, 1998, Zero Corporation, Burbank,  
11 CA, a copy of which is attached as Exhibit A to the Certificate of Completion that is attached as  
12 Exhibit B to the Initial Petition. Those resolutions designating the Regional Board as the  
13 administering agency refer to “site investigation and remedial action” and “hazardous materials”  
14 without any limitation on the Regional Board’s jurisdiction.

15           8.       There would be a whole lot more applications for site designation if the jurisdiction  
16 of an environmental agency could be limited by the scope of what happens to be mentioned in an  
17 application!

18           9.       Moreover, if the contention regarding limited jurisdiction and limited scope of the  
19 Certificate of Completion held water (no pun intended), there would have been no reason to  
20 mention the Certificate of Completion in connection with the Initial Order other than, perhaps, to  
21 say that it was irrelevant to a chromium investigation (otherwise leaving the Certificate in effect).  
22 Instead, the Regional Board’s letter of May 10, 2011, reopening the site and delivering the Initial  
23 Order, took great pains to discuss the Certificate of Completion as follows:

24                   The former responsible party, APW North America, received a Certificate of Completion  
25 from the Cal/EPA in 2002. This Regional Board is the administering agency of record and  
26 we have determined that the Certificate is no longer binding on the Regional Board. As  
27 stated above, the Regional Board has received new information. Pursuant to Health and  
28 Safety Code section 25264(c)(4), we may reopen the investigation if a hazardous materials  
release is discovered at the site that was not subject of the prior site investigation. Also,  
section 25264(c)(5) states that a site may be reopened if new facts causes the agency to

1 find that further site investigation and remediation is required in order to prevent a  
2 significant risk to human health and safety or to the environment. The 2009 Caltrans  
3 report found that detectable concentrations of Cr6 in soil samples exceed the typical  
background concentrations in the native soils in the Burbank area.

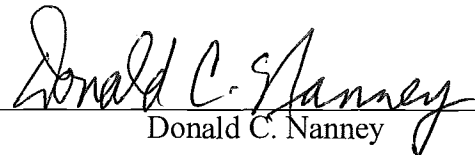
4 10. That statement is evidence that the Regional Board itself considered its Certificate  
5 of Completion to be applicable such that permissible statutory grounds had to be found and cited  
6 to justify reopening of the site.

7 11. The flimsiness and invalidity of the cited grounds was thoroughly discussed in the  
8 Initial Petition and will not be repeated here. I would only emphasize that the subject of the  
9 investigations leading to the Certificate of Completion included not only VOCs but also emerging  
10 chemicals including chromium. Where that is the case as a matter of fact, and the site was in fact  
11 closed in light of the findings of those investigations, there is nothing in the cited code sections to  
12 the effect that the Certificate must expressly note every detail and every chemical that was the  
13 subject of investigation in order to apply. That would exalt form over substance. Presumably for  
14 that reason the Regional Board did not rely on the absurd contention and grasped for some  
15 statutory exception to the Certificate of Completion.

16 12. As detailed in the Declaration of Eric Smalstig in Support of Second Petition  
17 submitted herewith, the subsequent investigation that Northridge Properties was compelled to  
18 undertake for lack of a stay resulted in findings completely consistent with the pre-existing data,  
19 barely any detectible Cr6 at the site, no new facts or material change in facts, so that the Second  
20 Order is not warranted and, like the Initial Order, is in violation of the Certificate of Completion.

21 I declare under penalty of perjury under the laws of the State of California that the  
22 foregoing is true and correct.

23 Executed this 26 day of August, 2014, at Santa Monica, California.

24  
25   
26 Donald C. Nanney  
27  
28

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6 Attorneys for Petitioner  
Northridge Properties, LLC  
7

8 STATE OF CALIFORNIA

9 STATE WATER RESOURCES CONTROL BOARD  
10

11 In the Matter of Los Angeles Regional Water  
12 Quality Control Board 13267 Order –  
Northridge Properties, LLC, former Zero  
13 Corporation Facility, 777 North Front Street,  
Burbank, California  
14

No.

**DECLARATION OF ERIC SMALSTIG IN  
SUPPORT OF SECOND PETITION FOR  
REVIEW, REQUEST FOR HEARING  
AND REQUEST FOR STAY**

15  
16 I, Eric Smalstig, declare as follows:

17 1. I am a Professional Engineer duly licensed (P.E. – Civil) and registered in the State  
18 of California with the Board for Professional Engineers & Land Surveyors under license number  
19 C56128. I am currently employed as a Principal of Geosyntec Consultants, Inc. (Geosyntec) in  
20 Huntington Beach, California. I have been practicing environmental engineering consultant for  
21 over 23 years.

22 2. In my engineering consulting position, I have been working for Northridge  
23 Properties, LLC (Northridge) on this site (777 N. Front Street, Burbank, California, *see* Nanney  
24 Dec #1, Exhibit 1, Figure 2) since July 2011. Northridge is the property owner and petitioner in  
25 this matter. I have personal knowledge of the facts set forth herein, except as to those stated on  
26 information and belief and, as to those, I am informed and believe them to be true. If called as a  
27 witness, I could and would competently testify to the matters stated herein. I make this  
28

1 declaration in support of the Second Petition for Review, Request for Hearing and Request for  
2 Stay submitted herewith.

3           3.       The California Regional Water Quality Control Board, Los Angeles Region  
4 (RWQCB) issued the Requirement for Technical Reports to Northridge pursuant to the California  
5 Water Code Section 13267 Order (*see* Nanney Dec #1, Exhibit 2), therefore the RWQCB is the  
6 lead environmental agency for the requested hexavalent chromium (also Cr6) site investigations at  
7 the property.

8           4.       The purpose of this declaration is to provide certain technical facts related to the  
9 Second Petition for review being filed on behalf of Northridge, and provide opinions related to the  
10 relevance of these facts to the issues raised in the Second Petition. These technical facts include:

11                   a.       Site Soil Results Compared to Federal/Regional Screening Level (RSL) for  
12 Cr6 – A presentation and review of site soil results in comparison to the Federal (i.e., USEPA,  
13 Region 9) Regional Screening Level (RSL) values for Cr6 (latest update: May 2014) including  
14 Industrial Soil Screening Levels and Soil Screening Levels calculated to be protective of ground  
15 water resources (Exhibit 1 to this declaration).

16                   b.       Area Groundwater Quality Data Review – The USEPA has been (and is  
17 currently) conducting an assessment of the water quality in the vicinity of the Northridge property  
18 as part of the San Fernando Valley Superfund (Glendale Chromium Operable Unit of the SFV  
19 Superfund Site, or ‘GCOU’) investigation.

20           5.       Based on historical site operations, the Northridge property (prior to Northridge’s  
21 ownership of the property) has been the subject of several environmental investigations beginning  
22 in the late 1980s. Several of these environmental investigations included sampling and analysis of  
23 site soils for potential chromium contamination below and adjacent to key site features where  
24 potential chromium contamination may be anticipated (Law/Crandall 1997, Emcon 1997, Ninyo &  
25 Moore 2009, Geosyntec 2012).

26           6.       The most recent RWQCB-approved soil investigation (Geosyntec 2012) targeted  
27 the former industrial waste water clarifiers at the site (*see* Nanney Dec #1, Exhibit 1). Per  
28 discussions with Alex Lapostol, USEPA Contractor and RWQCB representative in the field

1 during placement of anticipated soil boring locations as well as during the drilling process, soil  
 2 samples were collected from multiple depths below the existing concrete foundations and adjacent  
 3 to the clarifiers and analyzed for Cr6. Due to geophysical clearance of each site boring location,  
 4 certain anticipated locations had to be re-located slightly (i.e., a few feet) prior to drilling to adjust  
 5 for clearance from the clarifier walls. These locations were discussed in the field with Alex  
 6 Lapostol. The Cr6 chemical analytical results indicated that the Cr6 concentrations from the  
 7 majority of samples were below laboratory reporting limits (i.e., non-detectable). The results from  
 8 the most recent environmental investigation (shown in Exhibit 2) are included below:

Boring	Depth (feet below grade)	Concentration (mg/kg)
SS-1	5	Non-Detect (<0.40)
SS-1	10	Non-Detect (<0.40)
SS-1	15	Non-Detect (<0.40)
SS-1	20	Non-Detect (<0.40)
SS-2	5	1.10
SS-2	10	0.96
SS-2	15	Non-Detect (<0.40)
SS-2	20	Non-Detect (<0.40)
SS-3	5	Non-Detect (<0.40)
SS-3	10	Non-Detect (<0.40)
SS-3	15	Non-Detect (<0.40)
SS-3	20	Non-Detect (<0.40)
SS-4	5	Non-Detect (<0.40)
SS-4	10	Non-Detect (<0.40)
SS-4	15	Non-Detect (<0.40)
SS-4	20	0.41
SS-5	5	1.30
SS-5	10	Non-Detect (<0.40)
SS-5	15	Non-Detect (<0.40)
SS-5	20	Non-Detect (<0.40)

27           7.       The results indicate that Cr6 was not detected in soils at any sampling depth within  
 28 borings SS-1 and SS-3.



1           8.       The results indicate that Cr6 was detected at approximately 1 mg/kg within the  
2 upper two soil sampling intervals in SS-2 and within the upper soil sampling interval in SS-3. It  
3 should be noted that Building 12 where SS-2 was placed, was the primary location where  
4 aluminum alodining (chrome plating) operations occurred.

5           9.       The results indicate that, while Cr6 was not detected in the upper three soil  
6 sampling intervals in SS-4, Cr6 was detected at 0.41 mg/kg, 0.01 above the laboratory analytical  
7 reporting limit (0.40 mg/kg).

8           10.      The results indicate that none of the soil samples exceeded the USEPA Region 9  
9 Industrial Soil Regional Screening Level of 6.3 mg/kg (Exhibit 2 to this declaration).

10          11.      Each of the detected values of Cr6, as well as the laboratory detection limit of 0.40  
11 mg/kg, are above the USEPA Region 9 RSL for protection of ground water resources of 0.00067  
12 mg/kg. The RSL value of 0.00067 is a calculated value based on a series of human health risk  
13 calculations and corresponding assumptions. As presented in the user's guide for the RSLs on the  
14 USEPA website (highlighted emphasis added) ([http://www.epa.gov/reg3hwmd/risk/human/rb-  
15 concentration\\_table/usersguide.htm](http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/usersguide.htm)):

16                   *These equations are used to calculate screening levels in soil (SSLs) that are*  
17                   *protective of groundwater. SSLs are either back-calculated from protective risk-based*  
18                   *ground water concentrations or based on MCLs. The SSLs were designed for use*  
19                   *during the early stages of a site evaluation when information about subsurface*  
20                   *conditions may be limited. Because of this constraint, the equations used are based on*  
21                   *conservative, simplifying assumptions about the release and transport of*  
22                   *contaminants in the subsurface.*

23          12.      Indeed, the value of 0.00067 mg/kg is three orders of magnitude (i.e., a factor of  
24 1000x) below the reportable limit at which commercial chemical laboratories can detect and  
25 quantify the presence of the contaminant.

26          13.      The laboratory that performed the chemical analysis of soils from the Northridge  
27 property (Calscience of Stanton, California) is certified by the State of California Environmental  
28 Laboratory Accreditation Program, ELAP, per RWQCB requirements. As required by original

1 Section 13267 Order received by Northridge in May 2011, the soil samples were analyzed for the  
2 RWQCB-specified and EPA-certified Method EPA7199 (Exhibit 3 to this declaration, Appendix  
3 A). EPA Method 7199 utilizes Ion Chromatography (IC) to detect Cr6 according to the prescribed  
4 methodology. Other EPA methods exist to analyze for Cr6 (e.g., EPA Method 7196A,  
5 colorimetric determination of Cr6) but these methods result in even higher detection limits than  
6 the method specified by the RWQCB and used by Northridge according to the RWQCB-approved  
7 work plan.

8 14. Even though each of the Cr6 detections in the RWQCB-approved site investigation  
9 were below the USEPA-derived Industrial Soil RSL, the fractional value (i.e., 0.01) above the  
10 detection limit in SS-4 at 20 feet below ground surface was highlighted as the primary reason for  
11 the RWQCB requests for expanded environmental investigation at the Northridge property.

12 15. The Northridge property is situated centrally near the northerly edge of the GCOU.  
13 The GCOU includes a large (i.e., multiple square mile) area of known Cr6 impacts to soil and  
14 ground water (*see* Nanney Dec #1, Exhibit 11).

15 16. Several ground water monitoring wells are located in the vicinity of the Northridge  
16 property (*see* Nanney Dec #1, Exhibits 11, 18, 19). In addition, the Northridge property lies  
17 between two large ground water extraction and treatment systems installed and operated within the  
18 SFV Superfund area: Burbank Operable Unit Extraction Well Field and Treatment System, and  
19 the Glendale North Operable Unit Extraction Well Field and Treatment System (Exhibit 4).

20 17. The ground water flow direction in the vicinity of the Northridge property was  
21 historically to the southeast as water flowed out of the Verdugo Mountains to the north of the  
22 Northridge property and infiltrated the alluvial plain below the site. Ground water would then  
23 largely follow surface water flow patterns (i.e., flow southeasterly) along the orientation of the  
24 Burbank Western Wash Channel which flows southeast until it joins the Los Angeles River. This  
25 orientation of ground water flow is evident in the elongated concentration pathways of Cr6  
26 detected within the SFV Superfund area.

27 18. Since operation of the SFV Superfund extraction and treatment systems began,  
28 ground water flow directions have been influenced by SFV Superfund extraction wells. During

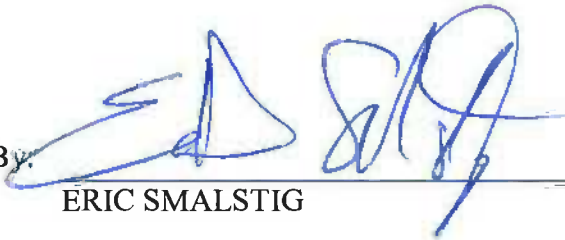
1 active, continuous pumping at these systems, a localized change in ground water flow direction to  
 2 the southwest below the site may be occurring (Exhibit 4 to this declaration), though there are few  
 3 wells to the east of the Northridge property to definitively calculate a ground water gradient or  
 4 flow pattern. Indeed, RWQCB staff and EPA embedded contractors acknowledge that the SFV  
 5 Superfund remediation measures are "...just spreading contamination around..." and that the  
 6 "[p]lume appears to be shifting..." (see Nanney Dec #1, Exhibit 20).

7 19. Sample analysis from ground water wells PWA-2 and PWA-3 in the immediate  
 8 vicinity of the Northridge property demonstrate a decreasing Cr6 concentration in the groundwater  
 9 below the Northridge property in the southeasterly direction of predominant ground water flow.

10 20. Sample analysis from ground water wells PWA-2 and PWA-3 in the immediate  
 11 vicinity of the Northridge property (see Nanney Dec #1, Exhibit 19) do not indicate concentrations  
 12 above the recently established chromium Maximum Contaminant Level in drinking water of  
 13 10 ug/liter.

14  
 15 I declare under penalty of perjury under the laws of the State of California that the  
 16 foregoing is true and correct.

17 DATED: September 3, 2014

18  
 19  
 20 By:   
 ERIC SMALSTIG

21  
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 28

**Exhibit 1**

**Declaration of Eric Smalstig**

**ISO Second Petition**

Key: I = IRIS; P = PRTVA; A = ATSDR; C = Cal EPA; X = APPENDIX D PRIORITY SCREEN (See FAC427); H = HEAST; N = New Jersey; O = EPA Office of Water; F = See FAC; E = Environmental Criteria and Assessment Office; S = see user guide Section 5; L = see user guide on lead; M = mutagen; V = volatile; R = RDA applied (See User Guide for Arsenic note); C = cancer; \* = where in SL < 100X CS; \*\* = where in SL < 100X CS; n = noncancer; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed GAT (See User Guide); SSL values are based on DAF=1.

Toxicity and Chemical-Specific Information

Contaminant

Resident Soil

Industrial Soil

Resident Air

Industrial Air

Trapwater

MCL

Risk-based SSL

MCL-based SSL

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Toxicity and Chemical Specific Information										Contaminant				Residential Levels				Screening Levels				Protection of Ground Water SSLs				
SFO	K	UR	RfD	SL	SL	SL	SL	SL	SL	SL	CAS No.	Resident Soil (mg/kg)	Industrial Soil (mg/kg)	Resident Air (ug/m <sup>3</sup> )	Industrial Air (ug/m <sup>3</sup> )	Tapwater (key)	MCL (ug/L)	Risk-based SSL (mg/kg)	MCL-based SSL (mg/kg)							
(mg/kg-day) <sup>-1</sup>	e	(ug/m <sup>3</sup> -day) <sup>-1</sup>	e	(mg/m <sup>3</sup> -day) <sup>-1</sup>	e	(mg/m <sup>3</sup> -day) <sup>-1</sup>	e	(mg/m <sup>3</sup> -day) <sup>-1</sup>	e	(mg/m <sup>3</sup> -day) <sup>-1</sup>		key	key	key	key	key		key	key							
1.7E-01	I	4.9E-05	C	2.0E-03	P	1.0E-03	P	V	1	1	15E+03	100-51-6	6.2E+03	n	8.2E+04	n	5.7E-02	C*	2.5E-01	C*	8.9E-02	C*	4.0E+00	4.8E-01	n	
2.4E-03	I	2.0E-03	C	2.0E-03	P	2.0E-05	I	1.0E-04	1	0.007	7400-41-7	1.1E+02	n	4.8E+03	n	1.2E-03	C*	5.1E-03	C*	2.5E+01	C*	4.0E+00	1.9E+01	n	3.2E+00	
9.0E-03	P	1.0E-03	P	1.0E-04	P	1.0E-04	P	1.0E-04	1	0.1	141-66-2	6.2E+00	n	8.2E+01	n	2.0E+00	n	2.0E+00	n	2.0E+00	n	2.0E+00	7.6E-01	n	7.6E-01	n
1.5E-02	I	6.2E-02	I	5.0E-02	I	2.0E-02	H	V	1	0.1	42576-02-3	5.5E+02	n	7.4E+03	n	1.0E+02	n	1.0E+02	n	1.0E+02	n	1.0E+02	1.4E+03	n	1.4E+03	n
7.0E-02	H	1.0E-05	H	4.0E-02	I	4.0E-04	X	V	1	0.1	82657-04-3	9.2E+02	n	1.2E+04	n	4.2E-01	n	1.8E+00	n	3.0E-02	n	3.0E-02	1.4E+03	n	1.4E+03	n
1.1E+00	I	3.3E-04	I	3.0E-03	P	1.0E-03	P	V	1	0.1	108-60-1	4.9E+00	n	2.2E+01	n	2.8E-01	n	1.2E+00	n	3.6E-01	n	3.6E-01	1.3E+04	n	1.3E+04	n
2.2E+02	I	6.2E-02	I	5.0E-02	I	2.0E-02	H	V	1	0.1	111-91-1	1.8E+01	n	2.5E+03	n	8.5E-03	C	3.7E-02	C	1.4E-02	C	1.4E-02	3.6E-06	n	3.6E-06	n
7.0E-01	I	6.0E-04	X	4.0E-03	I	1.3E-02	C	1	1	0.1	542-98-1	8.3E-05	n	3.6E-04	n	4.5E-05	C	2.0E-04	C	7.2E-05	C	7.2E-05	1.7E-08	n	1.7E-08	n
2.0E+00	X	6.0E-04	X	8.0E-03	I	6.0E-02	I	V	1	0.1	8005-7	3.1E+03	n	4.1E+03	n	2.1E-01	n	8.8E+01	n	4.0E+04	n	4.0E+04	5.8E+01	n	5.8E+01	n
6.2E-02	I	3.7E-05	C	2.0E-02	I	4.0E-02	X	V	1	0.1	10294-34-5	1.6E+05	n	2.3E+06	n	1.1E+01	n	8.8E+01	n	4.0E+04	n	4.0E+04	1.3E+04	n	1.3E+04	n
7.9E-03	I	1.1E-06	I	2.0E-02	I	2.0E-02	X	V	1	0.1	7637-07-2	1.6E+04	n	2.3E+05	n	4.7E+04	n	1.4E+01	n	8.0E+02	n	8.0E+02	3.6E-06	n	3.6E-06	n
2.0E+00	X	6.0E-04	X	8.0E-03	I	6.0E-02	I	V	1	0.1	15541-45-4	2.6E+02	n	1.1E+01	n	4.7E-03	C	2.0E-02	C	7.4E-03	C	7.4E-03	8.5E-04	n	8.5E-04	n
3.4E+00	C	3.0E-05	I	1.0E-01	I	2.0E-03	I	V	1	0.1	108-86-1	2.9E+02	n	1.8E+03	n	6.3E+01	n	2.6E+02	n	6.2E+01	n	6.2E+01	2.1E-02	n	2.1E-02	n
1.9E-03	P	2.0E-01	P	2.0E-01	P	3.0E+01	P	1	1	0.1	74-97-5	1.5E+02	n	6.3E+02	n	4.2E+01	n	1.8E+02	n	8.3E+01	n	8.3E+01	4.5E-01	n	4.5E-01	n
2.0E-04	C	5.7E-08	C	5.0E-02	I	3.0E+01	P	1	1	0.1	75-27-4	2.9E+01	n	1.3E+00	n	7.6E-02	C	3.3E-01	C	1.3E-01	C	1.3E-01	8.0E+01(F)	n	8.0E+01(F)	n
3.6E-03	P	5.0E-02	P	5.0E-02	P	5.0E-02	P	V	1	0.1	75-25-2	6.7E+01	n	2.9E+02	n	2.6E+00	C	1.1E+01	C	9.2E+00	C*	9.2E+00	1.9E-03	n	1.9E-03	n
2.0E-01	I	1.0E-01	I	1.0E-01	I	2.0E-03	I	V	1	0.1	2104-96-3	3.1E+02	n	4.1E+03	n	4.1E+03	n	3.5E+01	n	3.5E+01	n	3.5E+01	1.5E-01	n	1.5E-01	n
3.4E+00	C	3.0E-05	I	1.0E-01	I	2.0E-03	I	V	1	0.1	1689-84-5	1.2E+03	n	1.6E+04	n	1.6E+04	n	3.3E+02	n	3.3E+02	n	3.3E+02	2.8E-01	n	2.8E-01	n
1.9E-03	P	2.0E-01	P	2.0E-01	P	3.0E+01	P	1	1	0.1	1689-99-2	1.2E+03	n	1.6E+04	n	1.6E+04	n	3.3E+02	n	3.3E+02	n	3.3E+02	2.8E-01	n	2.8E-01	n
2.0E-04	C	5.7E-08	C	5.0E-02	I	3.0E+01	P	1	1	0.1	74-97-5	2.9E+01	n	1.3E+00	n	7.6E-02	C	3.3E-01	C	1.3E-01	C	1.3E-01	8.0E+01(F)	n	8.0E+01(F)	n
3.6E-03	P	5.0E-02	P	5.0E-02	P	5.0E-02	P	V	1	0.1	75-25-2	6.7E+01	n	2.9E+02	n	2.6E+00	C	1.1E+01	C	9.2E+00	C*	9.2E+00	1.9E-03	n	1.9E-03	n
2.0E-01	I	1.0E-01	I	1.0E-01	I	2.0E-03	I	V	1	0.1	74.83.9	6.8E+00	n	3.0E+01	n	5.2E+00	n	2.2E+01	n	7.5E+00	n	7.5E+00	1.5E-01	n	1.5E-01	n
3.4E+00	C	3.0E-05	I	1.0E-01	I	2.0E-03	I	V	1	0.1	106-99-0	5.8E-02	n	2.6E-01	n	9.4E-02	C*	4.1E-01	C*	2.0E-03	C	2.0E-03	9.9E-06	n	9.9E-06	n
1.9E-03	P	2.0E-01	P	2.0E-01	P	3.0E+01	P	1	1	0.1	71-36-3	1.2E+02	n	1.2E+03	n	1.2E+03	n	1.6E+01	n	1.6E+01	n	1.6E+01	4.5E-01	n	4.5E-01	n
2.0E-04	C	5.7E-08	C	5.0E-02	I	3.0E+01	P	1	1	0.1	78-92.2	3.1E+03	n	4.1E+03	n	4.1E+03	n	3.5E+01	n	3.5E+01	n	3.5E+01	1.5E-01	n	1.5E-01	n
3.6E-03	P	5.0E-02	P	5.0E-02	P	5.0E-02	P	V	1	0.1	2008-41-5	1.5E+02	n	6.4E+02	n	4.9E+01	n	2.2E+02	n	2.4E+02	n	2.4E+02	9.7E-02	n	9.7E-02	n
2.0E-01	I	1.0E-01	I	1.0E-01	I	2.0E-03	I	V	1	0.1	134-51-8	3.9E+03	n	5.8E+04	n	5.8E+04	n	1.0E+03	n	1.0E+03	n	1.0E+03	5.9E-00	n	5.9E-00	n
3.6E-03	P	5.0E-02	P	5.0E-02	P	5.0E-02	P	V	1	0.1	105-98-8	7.8E+03	n	1.2E+05	n	1.2E+05	n	6.9E+02	n	6.9E+02	n	6.9E+02	1.6E+00	n	1.6E+00	n
2.0E-01	I	1.0E-01	I	1.0E-01	I	2.0E-03	I	V	1	0.1	128-37-0	1.5E+02	n	6.4E+02	n	4.9E+01	n	2.2E+02	n	2.4E+02	n	2.4E+02	9.7E-02	n	9.7E-02	n
3.6E-03	P	5.0E-02	P	5.0E-02	P	5.0E-02	P	V	1	0.1	135-98-8	3.9E+03	n	5.8E+04	n	5.8E+04	n	1.0E+03	n	1.0E+03	n	1.0E+03	5.9E-00	n	5.9E-00	n
2.0E-01	I	1.0E-01	I	1.0E-01	I	2.0E-03	I	V	1	0.1	104-51-8	7.8E+03	n	1.2E+05	n	1.2E+05	n	6.9E+02	n	6.9E+02	n	6.9E+02	1.6E+00	n	1.6E+00	n
3.6E-03	P	5.0E-02	P	5.0E-02	P	5.0E-02	P	V	1	0.1	105-98-8	3.9E+03	n	5.8E+04	n	5.8E+04	n	1.0E+03	n	1.0E+03	n	1.0E+03	5.9E-00	n	5.9E-00	n
2.0E-01	I	1.0E-01	I	1.0E-01	I	2.0E-03	I	V	1	0.1	135-98-8	7.8E+03	n	1.2E+05	n	1.2E+05	n	6.9E+02	n	6.9E+02	n	6.9E+02	1.6E+00	n	1.6E+00	n
3.6E-03	P	5.0E-02	P	5.0E-02	P	5.0E-02	P	V	1	0.1	105-98-8	3.9E+03	n	5.8E+04	n	5.8E+04	n	1.0E+03	n	1.0E+03	n	1.0E+03	5.9E-00	n	5.9E-00	n
2.0E-01	I	1.0E-01	I	1.0E-01	I	2.0E-03	I	V	1	0.1	128-37-0	1.5E+02	n	6.4E+02	n	4.9E+01	n	2.2E+02	n	2.4E+02	n	2.4E+02	9.7E-02	n	9.7E-02	n
3.6E-03	P	5.0E-02	P	5.0E-02	P	5.0E-02	P	V	1	0.1	134-51-8	3.9E+03	n	5.8E+04	n	5.8E+04	n	1.0E+03	n	1.0E+03	n	1.0E+03	5.9E-00	n	5.9E-00	n
2.0E-01	I	1.0E-01	I	1.0E-01	I	2.0E-03	I	V	1	0.1	104-51-8	7.8E+03	n	1.2E+05	n	1.2E+05	n	6.9E+02	n	6.9E+02	n	6.9E+02	1.6E+00	n	1.6E+00	n
3.6E-03	P	5.0E-02	P	5.0E-02	P	5.0E-02	P	V	1	0.1	105-98-8	3.9E+03	n	5.8E+04	n	5.8E+04	n	1.0E+03	n	1.0E+03	n	1.0E+03	5.9E-00	n	5.9E-00	n
2.0E-01	I	1.0E-01	I	1.0E-01	I	2.0E-03	I	V	1	0.1	128-37-0	1.5E+02	n	6.4E+02	n	4.9E+01	n	2.2E+02	n	2.4E+02	n	2.4E+02	9.7E-02	n	9.7E-02	n
3.6E-03	P	5.0E-02	P	5.0E-02	P	5.0E-02	P	V	1	0.1	135-98-8	3.9E+03	n	5.8E+04	n	5.8E+04	n	1.0E+03	n	1.0E+03	n	1.0E+03	5.9E-00	n	5.9E-00	n
2.0E-01	I	1.0E-01	I	1.0E-01	I	2.0E-03	I	V	1	0.1	104-51-8	7.8E+03	n	1.2E+05	n	1.2E+05	n	6.9E+02	n	6.9E+02	n	6.9E+02	1.6E+00	n	1.6E+00	n
3.6E-03	P	5.0E-02	P	5.0E-02	P	5.0E-02	P	V	1	0.1	105-98-8	3.9E+03	n	5.8E+04	n	5.8E+04	n	1.0E+03	n	1.0E+03	n	1.0E+03	5.9E-00	n	5.9E-00	n
2.0E-01	I	1.0E-01	I	1.0E-01	I	2.0E-03	I	V	1	0.1	128-37-0	1.5E+02	n	6.4E+02	n	4.9E+01	n	2.2E+02	n	2.4E+02	n	2.4E+02	9.7E-02	n	9.7E-02	n
3.6E-03	P	5.0E-02	P	5.0E-02	P	5.0E-02	P	V	1	0.1	134-51-8	3.9E+03	n	5.8E+04												

Key: I = IRIS; P = PRTVA; A = ATSDR; C = Cal EPA; X = APPENDIX D PRIORITY SCREEN (See FAC427); H = HEASTJ; N = New Jersey; O = EPA Office of Water; F = See FACQ; E = Environmental Criteria and Assessment Office; S = see user guide Section 5; L = see user guide on lead; M = mutagen; V = volatile; R = RSD applied (See User Guide for Arsenic note); C = cancer; * = where n SL < 100 C SL; ** = where n SL < 100 C SL; n = noncancer; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed GAT (See User Guide); SSL values are based on DAF=1																																
Toxicity and Chemical-Specific Information																																
SFO	K	UR	RfD	IRG	LO	muta	Ben	ABS	Car																							
(mg/kg-day) <sup>-1</sup>	(μg/m <sup>3</sup> ) <sup>-1</sup>	(mg/kg-day)	(mg/m <sup>3</sup> )	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/kg)																							
Contaminant																																
CAS No.																																
Resident Soil																																
Industrial Soil																																
Screening Levels																																
Industrial Air																																
Trapper																																
MCL																																
Risk-based SSL																																
MCL-based SSL																																
2.0E-01	P		4.0E-03	1.0E-02	P	V		1	0.1	Chloroaniline, p-	106-47-8	2.7E+00	C*	1.2E+01	C	5.2E+01	n	2.2E+02	n	7.8E+01	C	3.6E+01	C	1.6E+04	C	5.3E+02	C	1.0E+02	1.6E+04	C	6.8E+02	
1.1E-01	C	3.1E-05	2.0E-02	1.0E-02	I			1	0.1	Chlorobenzene	106-90-7	4.8E+00	C	2.1E+01	C	9.1E-02	C	4.0E+01	C	3.1E+01	C	5.1E+02	C	1.3E+01	C	1.3E+01	C	5.1E+02	n	1.2E+01	1.3E+01	C
			3.0E-03	3.0E-01	P	V		1	0.1	Chlorobenzoic Acid, p-	74-11-3	1.8E+03	n	2.5E+03	ns	3.1E+02	n	1.3E+03	n	3.5E+01	n	6.4E+02	n	1.0E+05	n	1.0E+05	n	2.2E+02	6.4E+02	n	2.6E+01	n
			4.0E-02	5.0E+01	I	V		1	0.1	Chlorobutane, 1-	75-45-6	3.1E+03	ns	4.7E+04	ns	5.2E+04	n	2.2E+05	n	1.0E+05	n	1.0E+05	n	4.3E+01	n	4.3E+01	n	8.1E-02	4.3E+01	n	2.2E+02	
3.1E-02	C	2.3E-05	1.0E-02	9.8E-02	A	V		1	0.1	Chloroform	67-66-3	1.1E+02	C	1.4E+00	C	1.2E+01	C	5.3E+01	C	2.2E+01	C	8.0E+01(F)	C	6.1E+05	C	3.9E+02	C	1.9E+02	6.1E+05	C	2.2E+02	
2.4E+00	C	6.9E-04	2.0E-02	1.0E-02	I	V		1	0.1	Chloroethane	74-87-3	2.0E+02	C	8.9E-02	C	4.1E-03	C	1.8E-02	C	6.5E-03	C	1.4E+06	C	1.4E+06	C	2.3E+01	C	1.4E+06	C	2.3E+01	1.4E+06	C
3.0E-01	P	1.0E-03	1.0E-03	6.0E-04	P	V		1	0.1	Chlorotoluene, o-	107-30-2	1.8E+00	C	7.7E+00	C**	6.3E-01	n	2.6E+00	n	1.1E+01	C**	2.3E+01	C**	2.2E+04	C**	1.0E-02	C**	2.2E+04	C**	1.0E-02	2.2E+04	C**
6.3E-03	P	1.0E-03	1.0E-03	6.0E-04	P	V		1	0.1	Chlorotoluene, p-	88-73-3	2.0E+00	n	5.8E+03	n	4.2E+01	n	1.8E+00	n	8.3E-01	n	9.1E+01	n	2.5E+04	n	2.5E+04	n	7.1E-08	2.5E+04	n	2.5E+04	
3.1E-03	C	8.9E-07	1.5E-02	1.0E-02	I	V		1	0.1	Chlorotoluene, o-	76-06-2	1.7E+02	C**	7.4E+02	C**	3.2E+00	C	1.4E+01	C	2.2E+01	C*	4.9E+02	C*	4.9E+02	C*	2.3E+01	C*	4.9E+02	C*	2.3E+01	4.9E+02	C*
2.4E+02	C	6.9E-02	2.0E-01	1.0E-01	I	V		1	0.1	Chlorotoluene, p-	106-43-4	1.6E+03	ns	2.3E+04	ns	4.1E-05	C	1.8E-04	C	3.2E-04	C	2.5E+02	n	2.4E+01	n	2.4E+01	n	7.1E-08	2.4E+01	n	2.4E+01	
			1.0E-03	6.0E-01	C			1	0.1	Chloroform	54749-90-5	6.2E+01	n	8.2E+02	n	6.3E+02	n	2.6E+03	n	1.9E+03	n	8.4E+00	n	1.2E+01	n	1.2E+01	n	7.1E-08	1.2E+01	n	1.2E+01	
			1.0E-02	6.0E-01	C			1	0.1	Chloroform	101-21-3	3.1E+03	n	4.1E+04	n	6.3E+02	n	2.6E+03	n	1.9E+03	n	8.4E+00	n	1.2E+01	n	1.2E+01	n	7.1E-08	1.2E+01	n	1.2E+01	
			1.0E-01	6.0E-01	C			1	0.1	Chloroform	2921-88-2	6.2E+01	n	8.2E+02	n	6.3E+02	n	2.6E+03	n	1.9E+03	n	8.4E+00	n	1.2E+01	n	1.2E+01	n	7.1E-08	1.2E+01	n	1.2E+01	
			1.0E-02	6.0E-01	C			1	0.1	Chloroform	5598-13-0	3.1E+03	n	4.1E+04	n	6.3E+02	n	2.6E+03	n	1.9E+03	n	8.4E+00	n	1.2E+01	n	1.2E+01	n	7.1E-08	1.2E+01	n	1.2E+01	
			8.0E-04	6.0E-01	C			1	0.1	Chloroform	6028-56-4	4.9E+01	n	6.6E+02	n	6.3E+02	n	2.6E+03	n	1.9E+03	n	8.4E+00	n	1.2E+01	n	1.2E+01	n	7.1E-08	1.2E+01	n	1.2E+01	
5.0E-01	J	8.4E-02	3.0E-03	1.0E-04	I	M	0.023			Chloroform (III), insoluble salts	16065-83-1	1.2E+05	C	6.3E+00	C	1.2E-05	C	1.5E-04	C	3.5E-02	C	2.8E+00	n	2.2E+00	n	4.0E-07	n	4.0E-07	n	6.7E-04	4.0E-07	n
			9.0E-03	3.0E-04	P	6.0E-06	P	M	1	0.1	Chromium, Total	7440-48-4	2.3E+01	n	3.5E+02	n	3.1E-04	C*	1.4E-03	C*	6.0E+00	n	1.0E+02	n	2.7E+01	n	2.7E+01	n	1.8E+05	2.7E+01	n	
			4.0E-02	6.0E-01	C			1	0.1	Cobalt	7440-48-4	3.1E+03	n	4.7E+04	n	6.3E+02	n	2.6E+03	n	1.9E+03	n	8.0E+02	n	1.3E+03	n	2.8E+01	n	2.8E+01	n	4.6E+01	2.8E+01	n
			5.0E-02	6.0E-01	C			1	0.1	Copper	7744-50-8	3.1E+03	n	4.1E+04	n	6.3E+02	n	2.6E+03	n	1.9E+03	n	8.0E+02	n	1.3E+03	n	7.4E+01	n	7.4E+01	n	4.6E+01	7.4E+01	n
			5.0E-02	6.0E-01	C			1	0.1	Copper	108-39-4	3.1E+03	n	4.1E+04	n	6.3E+02	n	2.6E+03	n	1.9E+03	n	8.0E+02	n	1.3E+03	n	7.4E+01	n	7.4E+01	n	4.6E+01	7.4E+01	n
			1.0E-01	6.0E-01	C			1	0.1	Cresol, o-	95-48-7	6.2E+03	n	8.2E+04	n	6.3E+02	n	2.6E+03	n	1.9E+03	n	1.5E+00	n	1.5E+00	n	1.5E+00	n	1.5E+00	n	1.5E+00	1.5E+00	n
			1.0E-01	6.0E-01	C			1	0.1	Cresol, p-	106-44-5	6.2E+03	n	8.2E+04	n	6.3E+02	n	2.6E+03	n	1.9E+03	n	1.5E+00	n	1.5E+00	n	1.5E+00	n	1.5E+00	n	1.5E+00	1.5E+00	n
			1.0E-01	6.0E-01	C			1	0.1	Cresol, p-chloro-	59-50-7	6.2E+03	n	8.2E+04	n	6.3E+02	n	2.6E+03	n	1.9E+03	n	1.5E+00	n	1.5E+00	n	1.5E+00	n	1.5E+00	n	1.5E+00	1.5E+00	n
			1.0E-03	6.0E-01	C			1	0.1	Cresol, p-chloro-	1319-77-3	6.2E+03	n	8.2E+04	n	6.3E+02	n	2.6E+03	n	1.9E+03	n	1.5E+00	n	1.5E+00	n	1.5E+00	n	1.5E+00	n	1.5E+00	1.5E+00	n
1.9E+00	H		1.0E-03	1.0E-01	I	V		1	0.1	Crotonaldehyde, trans-	123-73-9	3.7E+01	C	1.7E+03	C	4.2E+02	n	1.8E+03	n	4.5E+02	C	8.2E+06	C	8.2E+06	C	7.4E+01	C	7.4E+01	C	6.1E+04	8.2E+06	C
2.2E-01	C	6.3E-05	2.0E-03	4.0E-01	I	V		1	0.1	Cumaldehyde	98-82-8	1.9E+03	ns	9.7E+03	ns	4.2E+02	n	1.8E+03	n	4.5E+02	C	8.2E+06	C	8.2E+06	C	7.4E+01	C	7.4E+01	C	6.1E+04	8.2E+06	C
8.4E-01	H		2.0E-03	4.0E-01	I	V		1	0.1	Cyanaldehyde	135-20-6	2.4E+00	C	1.0E+01	C	4.5E-02	C	1.9E-01	C	3.5E-01	C	6.1E+04	C	6.1E+04	C	7.4E+01	C	7.4E+01	C	6.1E+04	6.1E+04	C
			1.0E-03	4.0E-01	I	V		1	0.1	Cyanaldehyde	21725-46-2	6.3E+01	C	2.7E+00	C	4.5E-02	C	1.9E-01	C	3.5E-01	C	6.1E+04	C	6.1E+04	C	7.4E+01	C	7.4E+01	C	6.1E+04	6.1E+04	C
			1.0E-03	4.0E-01	I	V		1	0.1	Calcium Cyanide	592-01-8	7.8E+01	n	1.2E+03	n	8.3E-01	n	3.5E+00	n	2.0E+01	n	2.0E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	1.5E+02	n
			5.0E-03	8.0E-04	S	V		1	1.0E+07	Copper Cyanide	544-92-3	3.9E+02	n	5.8E+03	n	8.3E-01	n	3.5E+00	n	2.0E+01	n	2.0E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	1.5E+02	n
			6.0E-04	8.0E-04	S	V		1	1.0E+07	Copper Cyanide (CN-)	57-12-5	2.1E+01	n	1.3E+02	n	8.3E-01	n	3.5E+00	n	2.0E+01	n	2.0E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	1.5E+02	n
			1.0E-03	8.0E-04	S	V		1	1.0E+07	Cyanogen	460-19-5	2.1E+01	n	1.3E+02	n	8.3E-01	n	3.5E+00	n	2.0E+01	n	2.0E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	1.5E+02	n
			9.0E-02	8.0E-04	I	V		1	1.0E+07	Cyanogen Bromide	506-68-3	7.0E+03	n	1.1E+05	nm	8.3E-01	n	3.5E+00	n	2.0E+01	n	2.0E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	1.5E+02	n
			5.0E-02	8.0E-04	I	V		1	1.0E+07	Cyanogen Chloride	506-67-4	3.9E+03	n	5.8E+04	n	8.3E-01	n	3.5E+00	n	2.0E+01	n	2.0E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	1.5E+02	n
			6.0E-04	8.0E-04	I	V		1	1.0E+07	Hydrogen Cyanide	74-90-8	2.3E+01	n	1.5E+02	n	8.3E-01	n	3.5E+00	n	2.0E+01	n	2.0E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	1.5E+02	n
			2.0E-03	8.0E-04	I	V		1	1.0E+07	Potassium Cyanide	151-50-8	1.6E+02	n	2.3E+03	n	8.3E-01	n	3.5E+00	n	2.0E+01	n	2.0E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	1.5E+02	n
			5.0E-03	8.0E-04	I	V		1	1.0E+07	Potassium Silver Cyanide	506-61-6	3.9E+02	n	5.8E+03	n	8.3E-01	n	3.5E+00	n	2.0E+01	n	2.0E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	n	1.5E+02	1.5E+02	n
			1.0E-01	8.0E-04	I	V		1																								





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Toxicity and Chemical-Specific Information

Contaminant

Screening Levels

Protection of Ground Water SSLs

SFO	K	UR	RfD	Y	K	RfD	Y	K	RfD	Y	K	RfD	Y	K	RfD	Y	K	RfD	Y	K	RfD	Y	CAS No.	Resident Soil (mg/kg)	Industrial Soil (mg/kg)	Resident Air (ug/m <sup>3</sup> )	Industrial Air (ug/m <sup>3</sup> )	Tapwater (ug/L)	MCL (ug/L)	Risk-based SSL (mg/kg)	MCL-based SSL (mg/kg)	
																																Key
4.5E-02	C	1.3E-05	C	1.0E-03	I	1.0E-03	I	1.0E-03	I	1.0E-03	I	1.0E-03	I	1.0E-03	I	1.0E-03	I	1.0E-03	I	1.0E-03	I	1.0E-03	I	95-65-8	6.2E+01	8.2E+02	2.2E-01	9.4E-01	1.8E+01	2.1E-02	2.1E-02	n
8.0E-05	X	8.0E-05	X	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	513-37-1	2.1E-01	9.3E-01	3.3E-01	9.4E-01	3.3E-01	2.0E-04	2.0E-04	n
1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	534-52-1	4.9E+00	6.6E+01	1.5E+00	1.5E+00	1.5E+00	2.6E-03	2.6E-03	n
1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	131-89-5	1.2E+02	1.6E+03	2.3E+01	2.3E+01	2.3E+01	7.7E-01	7.7E-01	n
1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	528-29-0	6.2E+00	8.2E+01	2.0E+00	2.0E+00	2.0E+00	1.8E-03	1.8E-03	n
1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	99-65-0	6.2E+00	8.2E+01	2.0E+00	2.0E+00	2.0E+00	1.8E-03	1.8E-03	n
1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	1.0E-04	P	100-25-4	6.2E+00	8.2E+01	2.0E+00	2.0E+00	2.0E+00	1.8E-03	1.8E-03	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	51-28-5	1.2E+02	1.6E+03	3.9E+01	4.4E+02	4.4E+02	4.8E-02	4.8E-02	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	NA	7.8E-01	3.4E+00	3.2E-02	1.4E-01	1.4E-01	1.5E-04	1.5E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	121-14-2	1.7E+00	7.4E+00	3.2E-02	1.4E-01	1.4E-01	3.2E-04	3.2E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	666-20-2	3.6E+01	1.5E+00	3.2E-03	3.2E-03	3.2E-03	3.9E+01	3.9E+01	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	35572-78-2	1.5E+02	2.3E+03	3.2E-03	3.2E-03	3.2E-03	3.9E+01	3.9E+01	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	19406-51-0	1.5E+02	2.3E+03	3.2E-03	3.2E-03	3.2E-03	3.9E+01	3.9E+01	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	25321-14-6	1.2E+00	5.1E+00	1.6E-01	1.6E-01	1.6E-01	2.2E-04	2.2E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	88-85-7	6.2E+01	8.2E+02	1.5E+01	1.5E+01	1.5E+01	1.3E-01	1.3E-01	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	123-91-1	5.3E+00	2.3E+01	5.6E-01	2.5E+00	2.5E+00	1.6E-04	1.6E-04	n

Key: I = IRIS; P = PRTVA; A = ATSDR; C = Cal EPA; X = APPENDIX D PRTVA SCREEN (See FAC427); H = HEASTJ; N = New Jersey; O = EPA Office of Water; F = See FACQ; E = Environmental Criteria and Assessment Office; S = see user guide Section 5; L = see user guide on lead; M = mutagen; V = volatile; R = RSD applied (See User Guide for Arsenic notes); C = cancer; * = where in SL < 100X C SL; ** = where in SL < 10X C SL; n = noncancer; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed GSI (See User Guide); SSL values are based on DAF=1									
Toxicity and Chemical-Specific Information									
SFO	KUR	RfD	RFQ	e10	muta	Ben	ABS	Car	
(mg/kg-day) <sup>-1</sup>	(ug/m <sup>3</sup> -day) <sup>-1</sup>	(mg/kg-day) <sup>-1</sup>	(mg/m <sup>3</sup> -day) <sup>-1</sup>	Y	Y	Y	Y	(mg/kg)	
Contaminant									
Analyte									
CAS No.									
Resident Soil									
(mg/kg)	key	(mg/kg)	key	(ug/m <sup>3</sup> )	key	(ug/m <sup>3</sup> )	key	(ug/m <sup>3</sup> )	key
Industrial Soil									
(mg/kg)	key	(ug/m <sup>3</sup> )	key	(ug/m <sup>3</sup> )	key	(ug/m <sup>3</sup> )	key	(ug/m <sup>3</sup> )	key
Screening Levels									
Trapwater									
(ug/L)	key	(ug/L)	key	(ug/L)	key	(ug/L)	key	(ug/L)	key
MCL									
(ug/L)	key	(ug/L)	key	(ug/L)	key	(ug/L)	key	(ug/L)	key
Protection of Ground Water SSLs									
(mg/kg)	key	(mg/kg)	key	(mg/kg)	key	(mg/kg)	key	(mg/kg)	key
Risk-based SSL									
(mg/kg)	key	(mg/kg)	key	(mg/kg)	key	(mg/kg)	key	(mg/kg)	key
MCL-based SSL									
(mg/kg)	key	(mg/kg)	key	(mg/kg)	key	(mg/kg)	key	(mg/kg)	key
3.5E-03	I	1.0E-02	I	1.0E-01	I	1.0E-01	I	1.0E-01	I
1.9E-01	I	2.0E-03	I	9.8E-03	A	1.0E-01	I	1.0E-01	I
1.3E-05	I	1.3E-05	I	1.3E-05	I	1.3E-05	I	1.3E-05	I
9.0E-01	P	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
3.0E-00	I	3.0E-00	I	3.0E-00	I	3.0E-00	I	3.0E-00	I
1.0E-03	X	1.0E-03	X	1.0E-03	X	1.0E-03	X	1.0E-03	X
1.0E-03	V	1.0E-03	V	1.0E-03	V	1.0E-03	V	1.0E-03	V
9.0E-01	I	2.0E+00	I	2.0E+00	I	2.0E+00	I	2.0E+00	I
3.8E-00	H	4.3E-04	C	5.0E-02	H	1.0E-01	I	1.0E-01	I
1.5E+00	C	4.3E-04	C	5.0E-02	H	1.0E-01	I	1.0E-01	I
3.0E-02	I	8.6E-06	C	4.0E-04	I	8.0E-05	C	1.0E-01	I
4.0E-04	I	8.0E-05	C	4.0E-04	I	8.0E-05	C	1.0E-01	I
4.0E-04	I	1.0E-03	H	1.0E-03	H	1.0E-03	H	1.0E-03	H
1.0E-01	I	1.0E-01	I	1.0E-01	I	1.0E-01	I	1.0E-01	I
3.0E-03	I	1.0E-01	I	1.0E-01	I	1.0E-01	I	1.0E-01	I
1.0E-02	X	2.0E-02	X	2.0E-02	X	2.0E-02	X	2.0E-02	X
2.0E-02	P	3.0E-03	A	1.0E-02	A	1.0E-02	A	1.0E-02	A
3.0E-03	A	1.0E-02	A	1.0E-02	A	1.0E-02	A	1.0E-02	A
5.0E-05	I	1.3E-05	I	1.3E-05	I	1.3E-05	I	1.3E-05	I
1.3E-02	I	1.3E-02	I	1.3E-02	I	1.3E-02	I	1.3E-02	I
4.5E+00	I	1.3E-03	I	1.3E-03	I	1.3E-03	I	1.3E-03	I
9.1E+00	I	2.6E-03	I	2.6E-03	I	2.6E-03	I	2.6E-03	I
2.0E-04	I	2.0E-04	I	2.0E-04	I	2.0E-04	I	2.0E-04	I
1.6E+00	I	4.6E-04	I	8.0E-04	I	8.0E-04	I	8.0E-04	I
7.8E-02	I	2.2E-05	I	1.0E-03	A	1.0E-03	A	1.0E-03	A
6.3E+00	I	1.8E-03	I	8.0E-03	P	1.0E-01	I	1.0E-01	I
1.1E+00	I	5.3E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I
1.1E+00	I	3.1E-04	C	3.0E-04	I	3.0E-04	I	3.0E-04	I
1.8E+00	I	5.1E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I
4.0E-02	I	1.1E-05	C	7.0E-04	I	3.0E-02	I	1.0E-01	I
1.1E-01	I	3.0E-03	I	3.0E-03	I	3.0E-03	I	3.0E-03	I
4.0E-04	P	1.0E-05	V	1.0E-05	V	1.0E-05	V	1.0E-05	V
6.0E-02	H	7.0E-01	V	7.0E-01	V	7.0E-01	V	7.0E-01	V
2.0E+00	P	2.0E+00	P	2.0E+00	P	2.0E+00	P	2.0E+00	P
5.0E-03	I	3.0E-02	I	3.0E-02	I	3.0E-02	I	3.0E-02	I
3.0E+00	I	4.9E-03	I	3.0E-05	P	3.0E-05	P	3.0E-05	P
3.0E+00	I	4.9E-03	I	3.0E-05	P	3.0E-05	P	3.0E-05	P
6.0E-02	P	4.0E-02	C	1.4E-02	C	2.0E-03	I	1.0E-01	I
1.3E-02	I	1.3E-02	I	1.3E-02	I	1.3E-02	I	1.3E-02	I
2.5E-01	I	2.5E-01	I	2.5E-01	I	2.5E-01	I	2.5E-01	I
1.0E-02	A	4.0E-02	A	4.0E-02	A	4.0E-02	A	4.0E-02	A
4.0E-02	A	4.0E-02	A	4.0E-02	A	4.0E-02	A	4.0E-02	A
7.0E-01	P	7.0E-01	P	7.0E-01	P	7.0E-01	P	7.0E-01	P
1.0E-01	I	2.0E+00	C	2.0E+00	C	2.0E+00	C	2.0E+00	C
1.5E-02	I	1.5E-02	I	1.5E-02	I	1.5E-02	I	1.5E-02	I
3.0E-01	I	3.0E-01	I	3.0E-01	I	3.0E-01	I	3.0E-01	I
1.0E-01	I	1.0E-01	I	1.0E-01	I	1.0E-01	I	1.0E-01	I
5.0E-02	I	5.0E-02	I	5.0E-02	I	5.0E-02	I	5.0E-02	I
7.5E-02	I	7.5E-02	I	7.5E-02	I	7.5E-02	I	7.5E-02	I
2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I	2.0E-03	I

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Toxicity and Chemical-Specific Information									
SFO	K	K	K	K	K	K	K	K	K
(mg/kg-day) <sup>-1</sup>	e	e	e	e	e	e	e	e	e
(ug/m <sup>3</sup> ) <sup>-1</sup>	Y	Y	Y	Y	Y	Y	Y	Y	Y
(mg/kg-day)	Y	Y	Y	Y	Y	Y	Y	Y	Y
(ug/m <sup>3</sup> )	Y	Y	Y	Y	Y	Y	Y	Y	Y
Y	C	C	C	C	C	C	C	C	C
Y	Ben	Ben	Ben	Ben	Ben	Ben	Ben	Ben	Ben
Y	ABS	ABS	ABS	ABS	ABS	ABS	ABS	ABS	ABS
Y	Car	Car	Car	Car	Car	Car	Car	Car	Car
Y	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
2.8E-01	C	8.0E-05	C						
3.8E-02	C	1.1E-05	C						
1.0E-07	I	1.0E-07	I	1	0.1				
2.0E-03	I	2.0E-03	I	1	0.1				
2.0E-03	P	2.0E-01	P	1	0.1				
2.0E-01	P	2.0E-04	P	1	0.1				
1.0E-01	P	7.0E-04	C	1	0.1				
5.0E-01	P	1.0E-04	P	1	0.1				
3.0E-02	H	5.0E-03	I	1	0.1				
1.4E-01	I	5.0E-05	I	1	0.1				
2.4E-02	S	5.0E-05	I	0.04					
9.0E-05	H	9.0E-05	I	1	0.1				
3.0E-02	I	3.0E-02	I	1	0.1				
3.0E-04	I	3.0E-04	S	0.07					
1.0E-04	I	1.0E-04	I	1	0.1				
8.0E-05	I	8.0E-05	I	1	0.1				
3.0E-05	I	3.0E-05	I	1	0.1				
6.0E-02	I	6.0E-02	P	1	0.1				
1.0E-04	I	3.0E-02	P	1	0.1				
5.0E-05	I	2.0E+01	I	1	0.1				
2.0E+00	I	1.0E-03	I	1	0.1				
1.0E-03	I	2.5E-02	I	1	0.1				
4.9E-02	C	1.4E-05	C	1	0.1				
5.0E-03	I	5.0E-03	I	1	0.1				
8.0E-03	P	1.0E-03	P	1	0.1				
5.0E-03	P	2.0E-02	I	1	0.1				
1.0E+00	X	1.0E+00	X	1	0.1				
3.0E-02	H	2.0E-02	P	1	0.1				
6.0E-01	I	5.0E+00	I	1	0.1				
1.0E-03	X	2.0E-05	X	1	0.1				
8.0E-02	H	3.0E+00	I	1	0.1				
1.0E-03	C	2.8E-05	C	1	0.1				
1.8E-03	C	2.6E-07	C	1	0.1				
3.0E-04	X	3.0E-04	X	1	0.1				
2.0E-02	X	2.0E-02	X	1	0.1				
8.3E+00	C	2.4E-03	C	1	0.1				
3.7E-05	C	3.7E-05	C	1	0.1				
1.0E-02	A	1.0E-02	A	1	0.1				
2.0E-04	X	2.0E-04	X	1	0.1				
3.0E-04	X	3.0E-04	X	1	0.1				
6.3E-03	C	6.3E-03	C	1	0.1				
1.0E-08	I	1.0E-08	I	1	0.1				
4.3E-04	C	4.3E-04	C	1	0.1				
1.3E-05	C	1.3E-05	C	1	0.1				
4.6E-02	I	4.6E-04	C	1	0.1				
1.6E+00	C	1.6E+00	C	1	0.1				
7.0E-02	H	7.0E-02	H	1	0.1				
1.5E-01	I	1.5E-01	I	1	0.1				
3.0E-04	I	3.0E-04	I	1	0.1				
3.1E+02		3.1E+02							
301-04-2		301-04-2							
7439-92-1		7439-92-1							
1335-32-6		1335-32-6							
78-00-2		78-00-2							
330-55-2		330-55-2							
7439-99-2		7439-99-2							
83055-99-6		83055-99-6							
94-74-6		94-74-6							
94-81-5		94-81-5							
93-65-2		93-65-2							
121-75-5		121-75-5							
108-31-6		108-31-6							
123-33-1		123-33-1							
109-77-3		109-77-3							
8018-01-7		8018-01-7							
12427-38-2		12427-38-2							
7439-96-5		7439-96-5							
950-10-7		950-10-7							
24307-26-4		24307-26-4							
7487-99-7		7487-99-7							
7439-97-6		7439-97-6							
2267-92-6		2267-92-6							
62-38-4		62-38-4							
150-50-5		150-50-5							
78-48-8		78-48-8							
57837-19-1		57837-19-1							
126-98-7		126-98-7							
10265-92-6		10265-92-6							
67-56-1		67-56-1							
950-37-8		950-37-8							
16529-77-5		16529-77-5							
99-59-2		99-59-2							
72-45-5		72-45-5							
110-49-6		110-49-6							
109-86-4		109-86-4							
79-20-9		79-20-9							
96-33-3		96-33-3							
80-34-4		80-34-4							
108-10-1		108-10-1							
624-83-9		624-83-9							
80-62-6		80-62-6							
99-53-8		99-53-8							
298-00-0		298-00-0							
993-13-5		993-13-5							
23013-15-4		23013-15-4							
66-27-3		66-27-3							
1634-04-2		1634-04-2							
615-45-4		615-45-4							
99-55-8		99-55-8							
70-25-7		70-25-7							
66-21-5		66-21-5							
124-58-3		124-58-3							
74612-12-7		74612-12-7							
56-45-5		56-45-5							
645-49-5		645-49-5							
75-09-2		75-09-2							
101-61-1		101-61-1							
101-61-4		101-61-4							
101-17-9		101-17-9							
101-68-8		101-68-8							
98-83-9		98-83-9							
51218-45-2		51218-45-2							
1.9E+00	C	8.2E+00	C	3.5E-02	C	1.5E-01	C	2.8E-01	C
4.0E+02	L	8.0E+02	L	1.5E-01	L	1.1E+00	L	2.1E+00	L
1.4E+01	C	6.1E+01	C	2.6E-01	C	1.1E+00	C	2.1E+00	C
6.2E+03	n	8.2E+02	n	1.3E+03	n	3.3E+01	n	3.3E+01	n
1.2E+02	n	1.6E+03	n	1.5E+03	n	4.0E+01	n	4.0E+01	n
1.6E+02	n	2.3E+03	n	1.6E+05	n	3.9E+03	n	3.9E+03	n
1.2E+04	n	4.1E+02	n	4.1E+02	n	7.5E+00	n	7.5E+00	n
3.1E+01	n	8.2E+02	n	8.2E+02	n	1.5E+02	n	1.5E+02	n
6.1E+03	n	8.1E+04	n	7.3E-01	n	3.1E+00	n	3.1E+00	n
3.1E+04	n	4.1E+05	n	mm	n	1.0E+04	n	1.0E+04	n
6.2E+00	n	8.2E+01	n	mm	n	2.0E+00	n	2.0E+00	n
1.8E+03	n	2.5E+04	n	3.1E+02	n	5.9E+02	n	5.9E+02	n
3.1E+02	n	4.1E+03	n	mm	n	9.9E+01	n	9.9E+01	n
1.8E+03	n	2.6E+04	n	5.2E-02	n	2.2E-01	n	4.3E+02	n
5.5E+00	n	7.4E+01	n	3.1E-01	n	1.3E+00	n	1.8E+00	n
1.8E+03	n	2.5E+04	n	3.1E-01	n	1.3E+00	n	6.0E+02	n
9.4E+00	n	4.0E+01	n	3.1E-01	n	5.7E+00	n	2.0E+00	n
7.8E+00	n	1.2E+02	n	mm	n	2.0E+00	n	2.0E+00	n
4.9E+00	n	6.6E+01	n	mm	n	1.6E+00	n	1.6E+00	n
1.8E+00	n	2.5E+01	n	mm	n	6.0E+01	n	6.0E+01	n
1.8E+00	n	4.9E+04	n	mm	n	8.5E+02	n	8.5E+02	n
3.7E+03	n	4.9E+04	n	mm	n	1.2E+03	n	1.2E+03	n
7.5E+00	n	1.0E+02	n	3.1E+01	n	1.3E+02	n	1.9E+00	n
1.1E+01	n	4.1E+01	n	2.1E+04	n	1.0E+00	n	1.0E+00	n
3.1E+02	n	4.1E+03	n	2.1E+01	n	8.8E+04	n	1.9E+01	n
4.9E+02	n	6.6E+03	n	1.0E+00	n	1.6			

Key: I = IRIS; P = PRTVA; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAC/427); H = HEAST; J = New Jersey; O = EPA Office of Water; F = See FAC; E = Environmental Criteria and Assessment Office; S = see user guide Section 5; L = see user guide on lead; M = mutagen; V = volatile; R = RSD applied (See User Guide for Arsenic note); C = cancer; \* = where n SL < 100 C SL; \*\* = where n SL < 100 C SL; n = noncancer; m = concentration may exceed ceiling limit (See User Guide); s = concentration may exceed GSI (See User Guide); SSL values are based on DAF=1

Toxicity and Chemical-Specific Information

Contaminant

Screening Levels

Protection of Ground Water SSLs

SFO	K	UR	RfD	RC	mut	Ben	CAS No.	Resident Soil		Industrial Soil		Resident Air		Industrial Air		Trapwater	MCL	Risk-based SSL	
								(mg/kg-day) <sup>-1</sup>	(ug/m <sup>3</sup> ) <sup>-1</sup>	(mg/kg-day) <sup>-1</sup>	(ug/m <sup>3</sup> ) <sup>-1</sup>	(ug/m <sup>3</sup> ) <sup>-1</sup>	(ug/m <sup>3</sup> ) <sup>-1</sup>	(ug/m <sup>3</sup> ) <sup>-1</sup>	(ug/m <sup>3</sup> ) <sup>-1</sup>			(ug/L)	(mg/kg)
1.8E+01	C	5.1E-03	C	2.0E-04			21087-64-9	1.5E+03	n	2.1E+04	n	5.5E-04	n	2.4E-03	n	6.0E+04	2.4E+03	3.1E+03	1.7E+02
5.0E-03	I	2.0E-03	I	2.0E-03			8012-95-1	1.8E+05	nms	2.5E+06	nms	5.5E-04	n	2.4E-03	n	6.0E+04	2.4E+03	3.1E+03	1.7E+02
1.0E-01	I	2.0E-03	I	2.0E-03			2385-85-5	3.0E+02	n	1.6E+03	n	5.5E-04	n	2.4E-03	n	6.0E+04	2.4E+03	3.1E+03	1.7E+02
2.0E-03	I	2.0E-03	I	2.0E-03			2212-67-1	3.9E+02	n	5.8E+03	n	5.5E-04	n	2.4E-03	n	6.0E+04	2.4E+03	3.1E+03	1.7E+02
1.0E-01	I	2.0E-03	I	2.0E-03			743-31-7	7.8E+03	n	1.2E+05	n	1.0E+02	n	4.4E+02	n	1.5E+02	4.0E+03	1.4E+02	2.0E+00
3.0E-04	X	1.0E-01	P	1.0E-01			300-76-5	1.2E+02	n	1.6E+03	n	1.0E+02	n	4.4E+02	n	1.5E+02	4.0E+03	1.4E+02	2.0E+00
3.0E-04	X	1.0E-01	P	1.0E-01			6472-95-6	1.8E+01	n	3.5E+04	n	1.0E+02	n	4.4E+02	n	1.5E+02	4.0E+03	1.4E+02	2.0E+00
1.8E+00	C	0.0E+00	C	1.0E-01			15299-99-7	3.0E-01	n	1.3E+00	n	1.5E-02	n	6.1E-02	n	2.0E+02	2.0E+04	1.1E+01	2.4E+02
1.1E-02	C	1.4E-05	C	1.1E-02			13463-39-3	8.2E+02	n	1.1E+04	n	1.5E-02	n	6.1E-02	n	2.0E+02	2.0E+04	1.1E+01	2.4E+02
2.4E-04	I	1.1E-02	C	1.4E-05			1313-99-1	8.4E+02	n	1.2E+04	n	2.1E-02	n	8.8E-02	n	2.2E+02	2.0E+04	3.2E+01	2.6E+01
2.6E-04	C	2.0E-02	I	9.0E-05			NA	8.2E+02	n	1.1E+04	n	1.1E-02	n	4.7E-02	n	3.9E+02	2.0E+04	2.6E+01	2.6E+01
1.7E+00	C	4.8E-04	I	1.1E-02			7440-02-0	4.1E-01	n	1.9E+00	n	5.8E-03	n	2.6E-02	n	4.5E+02	1.0E+04	1.0E+04	1.0E+04
1.6E+00	I	2.0E-03	I	1.4E-05			14797-55-8	1.3E+05	n	1.9E+06	n	5.8E-03	n	2.6E-02	n	4.5E+02	1.0E+04	1.0E+04	1.0E+04
1.0E-01	I	2.0E-03	I	1.0E-01			NA	7.8E+03	n	1.2E+05	n	5.2E-02	n	2.2E-01	n	2.0E+03	1.0E+03	8.0E+02	1.6E+03
1.0E-02	X	5.0E-05	X	1.0E-02			88-74-4	6.1E+02	n	8.0E+03	n	6.3E+00	n	2.6E-01	n	3.8E+00	1.0E+03	1.6E+03	1.6E+03
4.0E-05	I	2.0E-03	I	9.0E-03			100-01-6	2.7E+01	n	1.2E+02	n	6.3E+00	n	2.6E-01	n	3.8E+00	1.0E+03	1.6E+03	1.6E+03
2.0E-02	P	6.0E-03	P	6.0E-03			98-95-3	5.1E+00	n	2.2E+01	n	7.0E-02	n	3.1E-01	n	1.4E-01	9.2E-05	9.2E-05	9.2E-05
3.0E+03	H	7.0E-02	H	3.0E+03			9004-70-0	1.8E+08	nms	2.5E+09	nms	7.0E-02	n	3.1E-01	n	1.4E-01	9.2E-05	9.2E-05	9.2E-05
1.3E+00	C	3.7E-04	C	1.0E-04			55-63-0	4.1E-01	n	1.8E+00	n	7.6E-03	n	3.3E-02	n	6.0E-02	5.4E-05	5.4E-05	5.4E-05
1.7E-02	P	6.0E-03	P	1.0E-01			55-88-7	6.2E+00	n	8.2E+01	n	3.3E-02	n	6.0E-02	n	6.0E-02	5.4E-05	5.4E-05	5.4E-05
8.8E-06	P	2.7E-03	H	5.0E-03			75-53-5	5.4E+00	n	2.4E+01	n	3.2E-01	n	1.4E+00	n	2.8E-02	1.4E-04	1.4E-04	1.4E-04
2.7E-03	C	7.7E-03	C	2.0E-02			79-46-9	1.4E-02	n	6.0E-02	n	1.0E-03	n	4.5E-03	n	2.1E-03	5.4E-07	5.4E-07	5.4E-07
3.4E-02	C	1.6E-03	C	1.9E-03			759-73-9	9.4E-04	n	8.6E-02	n	1.3E-04	n	1.6E-03	n	9.2E-04	2.6E-07	2.6E-07	2.6E-07
1.2E+02	I	1.6E-03	I	2.0E-03			684-93-5	9.9E-04	n	3.0E-05	n	3.0E-05	n	3.1E-04	n	4.6E-08	4.6E-08	4.6E-08	4.6E-08
5.4E+00	I	1.6E-03	I	2.0E-03			924-16-3	9.4E-02	n	4.3E-01	n	1.8E-03	n	7.7E-03	n	2.7E-03	5.5E-06	5.5E-06	5.5E-06
2.8E+00	I	8.0E-04	C	1.9E-03			61-64-7	7.6E-02	n	3.3E-01	n	1.4E-03	n	6.1E-03	n	1.1E-02	8.1E-06	8.1E-06	8.1E-06
1.5E+02	I	4.3E-02	I	8.0E-06			1116-54-7	1.9E-01	n	8.2E-01	n	3.5E-03	n	1.5E-02	n	2.8E-02	5.6E-06	5.6E-06	5.6E-06
5.1E+01	I	1.4E-02	I	8.0E-06			55-18-5	7.9E-04	n	1.5E-02	n	2.4E-05	n	2.9E-04	n	6.0E-08	1.2E-07	1.2E-07	1.2E-07
4.9E-03	I	2.6E-06	C	1.9E-03			86-30-6	1.1E-02	n	4.7E-02	n	4.1E+00	n	4.7E+00	n	3.2E-03	6.6E-02	6.6E-02	6.6E-02
2.2E+01	I	6.3E-03	C	1.9E-03			10595-95-6	2.4E-02	n	1.0E-01	n	4.5E-04	n	1.9E-03	n	3.5E-03	1.0E-06	1.0E-06	1.0E-06
9.4E+00	C	2.7E-03	C	1.9E-03			59-88-2	7.9E-02	n	3.4E-01	n	1.5E-03	n	6.5E-03	n	1.2E-02	2.8E-06	2.8E-06	2.8E-06
2.1E+00	I	6.1E-04	I	1.0E-04			100-75-4	5.7E-02	n	2.5E-01	n	1.0E-03	n	4.5E-03	n	8.2E-03	4.4E-06	4.4E-06	4.4E-06
1.6E-02	P	9.0E-04	P	3.0E-04			99-08-1	2.5E-01	n	1.1E+00	n	4.6E-03	n	2.0E-02	n	3.7E-02	1.4E-05	1.4E-05	1.4E-05
3.0E-04	X	2.0E-02	P	3.0E-04			88-72-2	3.2E+00	n	1.8E+01	n	1.5E-04	n	1.0E-03	n	1.7E+00	1.6E-03	1.6E-03	1.6E-03
4.0E-02	I	7.0E-04	I	3.0E-04			99-99-0	3.3E+01	n	1.4E+02	n	3.3E+01	n	4.2E+00	n	4.2E+00	2.9E-04	2.9E-04	2.9E-04
7.0E-04	I	3.0E-03	I	3.0E-03			11-84-2	1.1E+01	ns	7.2E+01	ns	2.1E+01	n	8.8E+01	n	5.3E+00	7.5E-02	7.5E-02	7.5E-02
5.0E-02	I	5.0E-02	I	5.0E-02			27314-13-2	2.5E+03	n	3.5E+04	n	3.2E-01	n	1.4E+00	n	2.8E-02	5.0E+00	5.0E+00	5.0E+00
7.0E-04	I	3.0E-03	I	3.0E-03			85509-19-9	4.3E+01	n	5.8E+02	n	1.1E+01	n	1.1E+01	n	1.1E+01	1.8E+00	1.8E+00	1.8E+00
3.0E-03	I	3.0E-03	I	3.0E-03			32356-92-0	1.8E+02	n	2.5E+03	n	2.5E+03	n	6.0E+01	n	6.0E+01	1.2E+01	1.2E+01	1.2E+01
5.0E-02	I	5.0E-02	I	5.0E-02			2691-41-0	3.8E+03	n	5.7E+04	n	1.0E+02	n	4.4E+02	n	1.5E+02	1.3E+00	1.3E+00	1.3E+00
2.0E-03	H	5.0E-02	I	5.0E-02			152-16-9	1.2E+02	n	1.6E+03	n	1.4E+04	n	4.0E+01	n	4.0E+01	4.0E+01	4.0E+01	4.0E+01
5.0E-02	I	5.0E-02	I	5.0E-02			19904-88-3	3.1E+03	n	4.1E+04	n	1.0E+02	n	4.4E+02	n	1.5E+02	1.5E+00	1.5E+00	1.5E+00
5.0E-03	I	2.5E-02	I	2.5E-02			19666-30-9	3.1E+02	n	4.1E+03	n	4.1E+03	n	4.7E+01	n	4.7E+01	4.8E-01	4.8E-01	4.8E-01
2.5E-02	I	2.5E-02	I	2.5E-02			23135-22-0	1.5E+03	n	2.1E+04	n	2.1E+04	n	5.0E+02	n	5.0E+02	1.1E+01	1.1E+01	1.1E+01
1.3E-02	I	1.3E-02	I	1.3E-02			76738-62-0	8.0E+02	n	1.1E+04	n	2.3E+02	n	2.3E+02	n	2.3E+02	4.6E-01	4.6E-01	4.6E-01
4.5E-03	I	4.5E-03	I	4.5E-03			1910-42-5	2.8E+02	n	3.7E+03	n	3.7E+03	n	9.0E+01	n	9.0E+01	1.2E+00	1.2E+00	1.2E+00
5.0E-03	H	5.0E-02	H	5.0E-02			56-38-2	3.7E+02	n	4.9E+03	n	4.1E+04	n	5.6E+02	n	5.6E+02	4.5E-01	4.5E-01	4.5E-01
4.0E-02	I	4.0E-02	I	4.0E-02			1114-71-2	3.1E+03	n	4.1E+04	n	4.1E+04	n	5.6E+02	n	5.6E+02	4.5E-01	4.5E-01	4.5E-01
2.0E-03	I	2.0E-03	I	2.0E-03			40847-42-1	2.5E+03	n	3.3E+04	n	3.3E+04	n	1.8E+02	n	1.8E+02	2.1E+00	2.1E+00	2.1E+00
1.0E-04	I	1.0E-04	I	1.0E-04			32534-81-9	1.2E+02	n	1.6E+03	n	1.6E+03	n	4.0E+01	n	4.0E+01	1.7E+00	1.7E+00	1.7E+00
1.0E-04	I	1.0E-04	I	1.0E-04			60348-60-9	6.2E+00	n	8.2E+01	n	8.2E+01	n	2.0E+00	n	2.0E+00	8.7E-02	8.7E-02	8.7E-02
9.0E-02	P	8.0E-04	I	8.0E-04			768-93-5	4.9E+01	n	6.6E+02	n	6.6E+02	n	3.2E+00	n	3.2E+00	2.4E-02	2.4E-02	2.4E-02
2.6E-01	H	3.0E-03	I	3.0E-03			76-01-7	5.9E+00	n	2.6E+01	n	2.6E+01	n	6.4E-01	n	6.4E-01	3.1E-04	3.1E-04	3.1E-04
4.0E-01	I	5.1E-06	C	5.0E-03			82-68-8	2.0E+00	n	8.9E+00	n	8.9E+00	n	1.2E-01	n	1.2E-01	1.4E-03	1.4E-03	1.4E-03
8.7E-05	C	9.9E-01	C	4.0E+00			87-86-5	9.9E-01	n	4.0E+00	n	5.5E-01	n	2.4E+00	n	4.0E-02			







Key: I = IRIS; P = PRTVA; A = ATSDR; C = Cal EPA; X = APPENDIX D PRIORITY SCREEN (See FAC Q427); H = HEAST1; N = New Jersey; O = EPA Office of Water; F = See FAC Q; E = Environmental Criteria and Assessment Office; S = see user guide Section 5; L = see user guide on lead; M = mutagen; V = volatile; R = RSD applied (See User Guide for Arsenic notes); C = cancer; * = where n SL < 100 C SL; ** = where n SL < 100 C SL; n = noncancer; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed GAT (See User Guide); SSL values are based on DAF=1									
Toxicity and Chemical-Specific Information									
SFO	K	K	K	K	K	K	K	K	K
(mg/kg-day) <sup>-1</sup>	UR	RfD	RFQ	eIO	muta-Ben	GIABS	ABS	Car	
(ug/m <sup>3</sup> ) <sup>-1</sup>	Y	Y	Y	Y	Y	Y	Y	(mg/kg)	
3.0E-02	X	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
1.8E-01	X	2.0E-04	X	4.0E-02	X	4.0E-02	X	4.0E-02	X
3.0E-02	P	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
1.0E+00	I	3.2E-04	I	7.5E-03	I	7.5E-03	I	7.5E-03	I
4.0E-02	P	3.0E-02	P	4.0E-03	P	4.0E-03	P	4.0E-03	P
1.1E+00	I	3.2E-04	I	7.5E-03	I	7.5E-03	I	7.5E-03	I
9.0E-03	P	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
7.0E-02	I	3.0E-01	H	2.0E-02	I	2.0E-02	I	2.0E-02	I
2.9E-02	H	3.0E-05	X	3.0E-05	X	3.0E-05	X	3.0E-05	X
2.9E-02	P	1.0E-02	X	2.0E-03	P	2.0E-03	P	2.0E-03	P
5.7E-02	I	1.6E-05	I	4.0E-03	I	4.0E-03	I	4.0E-03	I
4.6E-02	I	4.1E-06	I	5.0E-04	I	5.0E-04	I	5.0E-04	I
1.1E-02	I	3.1E-06	I	1.0E-01	I	1.0E-01	I	1.0E-01	I
3.0E+01	I	4.0E-03	X	3.0E-04	P	3.0E-04	P	3.0E-04	P
7.7E-03	I	7.5E-03	I	1.0E-02	X	1.0E-02	X	1.0E-02	X
2.0E-02	P	1.0E-02	X	5.0E-03	P	5.0E-03	P	5.0E-03	P
3.0E-02	I	5.0E-04	I	2.0E-02	X	2.0E-02	X	2.0E-02	X
2.0E-02	P	1.0E-02	X	3.0E-02	X	3.0E-02	X	3.0E-02	X
1.0E+00	C	2.9E-04	C	9.0E-03	I	9.0E-03	I	9.0E-03	I
7.2E-01	I	4.4E-06	I	3.0E-03	I	3.0E-03	I	3.0E-03	I
3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I
2.0E-01	S	1.0E-01	S	2.0E-01	S	2.0E-01	S	2.0E-01	S
3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I
3.0E-02	X	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
1.8E-01	X	2.0E-04	X	4.0E-02	X	4.0E-02	X	4.0E-02	X
3.0E-02	P	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
1.0E+00	I	3.2E-04	I	7.5E-03	I	7.5E-03	I	7.5E-03	I
4.0E-02	P	3.0E-02	P	4.0E-03	P	4.0E-03	P	4.0E-03	P
1.1E+00	I	3.2E-04	I	7.5E-03	I	7.5E-03	I	7.5E-03	I
9.0E-03	P	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
7.0E-02	I	3.0E-01	H	2.0E-02	I	2.0E-02	I	2.0E-02	I
2.9E-02	H	3.0E-05	X	3.0E-05	X	3.0E-05	X	3.0E-05	X
2.9E-02	P	1.0E-02	X	2.0E-03	P	2.0E-03	P	2.0E-03	P
5.7E-02	I	1.6E-05	I	4.0E-03	I	4.0E-03	I	4.0E-03	I
4.6E-02	I	4.1E-06	I	5.0E-04	I	5.0E-04	I	5.0E-04	I
1.1E-02	I	3.1E-06	I	1.0E-01	I	1.0E-01	I	1.0E-01	I
3.0E+01	I	4.0E-03	X	3.0E-04	P	3.0E-04	P	3.0E-04	P
7.7E-03	I	7.5E-03	I	1.0E-02	X	1.0E-02	X	1.0E-02	X
2.0E-02	P	1.0E-02	X	5.0E-03	P	5.0E-03	P	5.0E-03	P
3.0E-02	I	5.0E-04	I	2.0E-02	X	2.0E-02	X	2.0E-02	X
2.0E-02	P	1.0E-02	X	3.0E-02	X	3.0E-02	X	3.0E-02	X
1.0E+00	C	2.9E-04	C	9.0E-03	I	9.0E-03	I	9.0E-03	I
7.2E-01	I	4.4E-06	I	3.0E-03	I	3.0E-03	I	3.0E-03	I
3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I
2.0E-01	S	1.0E-01	S	2.0E-01	S	2.0E-01	S	2.0E-01	S
3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I
3.0E-02	X	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
1.8E-01	X	2.0E-04	X	4.0E-02	X	4.0E-02	X	4.0E-02	X
3.0E-02	P	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
1.0E+00	I	3.2E-04	I	7.5E-03	I	7.5E-03	I	7.5E-03	I
4.0E-02	P	3.0E-02	P	4.0E-03	P	4.0E-03	P	4.0E-03	P
1.1E+00	I	3.2E-04	I	7.5E-03	I	7.5E-03	I	7.5E-03	I
9.0E-03	P	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
7.0E-02	I	3.0E-01	H	2.0E-02	I	2.0E-02	I	2.0E-02	I
2.9E-02	H	3.0E-05	X	3.0E-05	X	3.0E-05	X	3.0E-05	X
2.9E-02	P	1.0E-02	X	2.0E-03	P	2.0E-03	P	2.0E-03	P
5.7E-02	I	1.6E-05	I	4.0E-03	I	4.0E-03	I	4.0E-03	I
4.6E-02	I	4.1E-06	I	5.0E-04	I	5.0E-04	I	5.0E-04	I
1.1E-02	I	3.1E-06	I	1.0E-01	I	1.0E-01	I	1.0E-01	I
3.0E+01	I	4.0E-03	X	3.0E-04	P	3.0E-04	P	3.0E-04	P
7.7E-03	I	7.5E-03	I	1.0E-02	X	1.0E-02	X	1.0E-02	X
2.0E-02	P	1.0E-02	X	5.0E-03	P	5.0E-03	P	5.0E-03	P
3.0E-02	I	5.0E-04	I	2.0E-02	X	2.0E-02	X	2.0E-02	X
2.0E-02	P	1.0E-02	X	3.0E-02	X	3.0E-02	X	3.0E-02	X
1.0E+00	C	2.9E-04	C	9.0E-03	I	9.0E-03	I	9.0E-03	I
7.2E-01	I	4.4E-06	I	3.0E-03	I	3.0E-03	I	3.0E-03	I
3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I
2.0E-01	S	1.0E-01	S	2.0E-01	S	2.0E-01	S	2.0E-01	S
3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I
3.0E-02	X	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
1.8E-01	X	2.0E-04	X	4.0E-02	X	4.0E-02	X	4.0E-02	X
3.0E-02	P	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
1.0E+00	I	3.2E-04	I	7.5E-03	I	7.5E-03	I	7.5E-03	I
4.0E-02	P	3.0E-02	P	4.0E-03	P	4.0E-03	P	4.0E-03	P
1.1E+00	I	3.2E-04	I	7.5E-03	I	7.5E-03	I	7.5E-03	I
9.0E-03	P	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
7.0E-02	I	3.0E-01	H	2.0E-02	I	2.0E-02	I	2.0E-02	I
2.9E-02	H	3.0E-05	X	3.0E-05	X	3.0E-05	X	3.0E-05	X
2.9E-02	P	1.0E-02	X	2.0E-03	P	2.0E-03	P	2.0E-03	P
5.7E-02	I	1.6E-05	I	4.0E-03	I	4.0E-03	I	4.0E-03	I
4.6E-02	I	4.1E-06	I	5.0E-04	I	5.0E-04	I	5.0E-04	I
1.1E-02	I	3.1E-06	I	1.0E-01	I	1.0E-01	I	1.0E-01	I
3.0E+01	I	4.0E-03	X	3.0E-04	P	3.0E-04	P	3.0E-04	P
7.7E-03	I	7.5E-03	I	1.0E-02	X	1.0E-02	X	1.0E-02	X
2.0E-02	P	1.0E-02	X	5.0E-03	P	5.0E-03	P	5.0E-03	P
3.0E-02	I	5.0E-04	I	2.0E-02	X	2.0E-02	X	2.0E-02	X
2.0E-02	P	1.0E-02	X	3.0E-02	X	3.0E-02	X	3.0E-02	X
1.0E+00	C	2.9E-04	C	9.0E-03	I	9.0E-03	I	9.0E-03	I
7.2E-01	I	4.4E-06	I	3.0E-03	I	3.0E-03	I	3.0E-03	I
3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I
2.0E-01	S	1.0E-01	S	2.0E-01	S	2.0E-01	S	2.0E-01	S
3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I
3.0E-02	X	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
1.8E-01	X	2.0E-04	X	4.0E-02	X	4.0E-02	X	4.0E-02	X
3.0E-02	P	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
1.0E+00	I	3.2E-04	I	7.5E-03	I	7.5E-03	I	7.5E-03	I
4.0E-02	P	3.0E-02	P	4.0E-03	P	4.0E-03	P	4.0E-03	P
1.1E+00	I	3.2E-04	I	7.5E-03	I	7.5E-03	I	7.5E-03	I
9.0E-03	P	3.0E-04	X	3.0E-04	X	3.0E-04	X	3.0E-04	X
7.0E-02	I	3.0E-01	H	2.0E-02	I	2.0E-02	I	2.0E-02	I
2.9E-02	H	3.0E-05	X	3.0E-05	X	3.0E-05	X	3.0E-05	X
2.9E-02	P	1.0E-02	X	2.0E-03	P	2.0E-03	P	2.0E-03	P
5.7E-02	I	1.6E-05	I	4.0E-03	I	4.0E-03	I	4.0E-03	I
4.6E-02	I	4.1E-06	I	5.0E-04	I	5.0E-04	I	5.0E-04	I
1.1E-02	I	3.1E-06	I	1.0E-01	I	1.0E-01	I	1.0E-01	I
3.0E+01	I	4.0E-03	X	3.0E-04	P	3.0E-04	P	3.0E-04	P
7.7E-03	I	7.5E-03	I	1.0E-02	X	1.0E-02	X	1.0E-02	X
2.0E-02	P	1.0E-02	X	5.0E-03	P	5.0E-03	P	5.0E-03	P
3.0E-02	I	5.0E-04	I	2.0E-02	X	2.0E-02	X	2.0E-02	X
2.0E-02	P	1.0E-02	X	3.0E-02	X	3.0E-02	X	3.0E-02	X
1.0E+00	C	2.9E-04	C	9.0E-03	I	9.0E-03	I	9.0E-03	I
7.2E-01	I	4.4E-06	I	3.0E-03	I	3.0E-03	I	3.0E-03	I
3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I
2.0E-01	S	1.0E-01	S	2.0E-01	S	2.0E-01	S	2.0E-01	S
3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I	3.0E-04	I
3.0E-02	X	3.0E-04	X	3.0E-04	X	3.0			



Key: I = IRIS; P = PPRTY; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTY SCREEN (See FAQ#27); H = HEAST; J = New Jersey; O = EPA Office of Water; F = see FAQ; E = Environmental Criteria and Assessment Office; S = see user guide Section 5; L = see user guide on lead; M = mutagen; V = volatile; R = RDA applied (See User Guide for Arsenic notice); C = cancer; * = where n SL < 100X C SL; ** = where n SL < 10X C SL; n = noncancer; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed GsM (See User Guide); SSL values are based on DAF=1																												
Toxicity and Chemical-specific Information										Contaminant		Screening Levels																
SFO (mg/kg-day) <sup>-1</sup>	K e Y	IUR (ug/m <sup>3</sup> ) <sup>-1</sup>	K e Y	RfD <sub>o</sub> (mg/kg-day)	K e Y	RfC <sub>o</sub> (mg/m <sup>3</sup> )	K e Y	C o m u n i c a t i o n	muta- Gen	GLABS	ABS	Cat (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m <sup>3</sup> )	key	Industrial Air (ug/m <sup>3</sup> )	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
3.0E-01	I										1		Zinc and Compounds	7440-66-6	2.3E+04	n	3.5E+05	n					6.0E+03	n		3.7E+02	n	
5.0E-02	I										1		Zinc	12122-67-7	3.1E+03	n	4.1E+04	n					9.9E+02	n		2.9E+00	n	
8.0E-05	X										1		Zirconium	7440-67-7	6.3E+00	n	9.3E+01	n					1.6E+00	n		4.8E+00	n	

**Exhibit 2**

**Declaration of Eric Smalstig**

**ISO Second Petition**



Boring	Depth (ft bgs)	Conc. Cr <sup>6</sup> (mg/kg)
SS-1	5	ND<0.4
	10	ND<0.4
	15	ND<0.4
	20	ND<0.4

Boring	Depth (ft bgs)	Conc. Cr <sup>6</sup> (mg/kg)
SS-2	5	1.10
	10	0.96
	15	ND<0.4
	20	ND<0.4

Boring	Depth (ft bgs)	Conc. Cr <sup>6</sup> (mg/kg)
SS-4	5	ND<0.4
	10	ND<0.4
	15	ND<0.4
	20	0.41

Boring	Depth (ft bgs)	Conc. Cr <sup>6</sup> (mg/kg)
SS-3	5	ND<0.4
	10 <sup>(1)</sup>	ND<0.4/ND<0.4
	15	ND<0.4
	20	ND<0.4

Boring	Depth (ft bgs)	Conc. Cr <sup>6</sup> (mg/kg)
SS-5	5	1.30
	10	ND<0.4
	15	ND<0.4
	20 <sup>(1)</sup>	ND<0.4/ND<0.4

**Notes:**

(1) Field duplicate samples were collected for these primary samples. Results are reported as (primary sample results)/(duplicate sample results).  
 ND - Not Detected  
 Cr<sup>6</sup> - Hexavalent chromium  
 ft bgs - feet below ground surface

**Legend**

- SS-3 Geosyntec Soil Boring
- Former Clarifier (Based on Site Plan provided by Northridge Properties, LLC and field observations)
- Former Building Location
- Site Boundary

**Hexavalent Chromium Analytical Results  
 Former Zero Corporation  
 777 North Front Street  
 Burbank, California**



Figure  
**3**

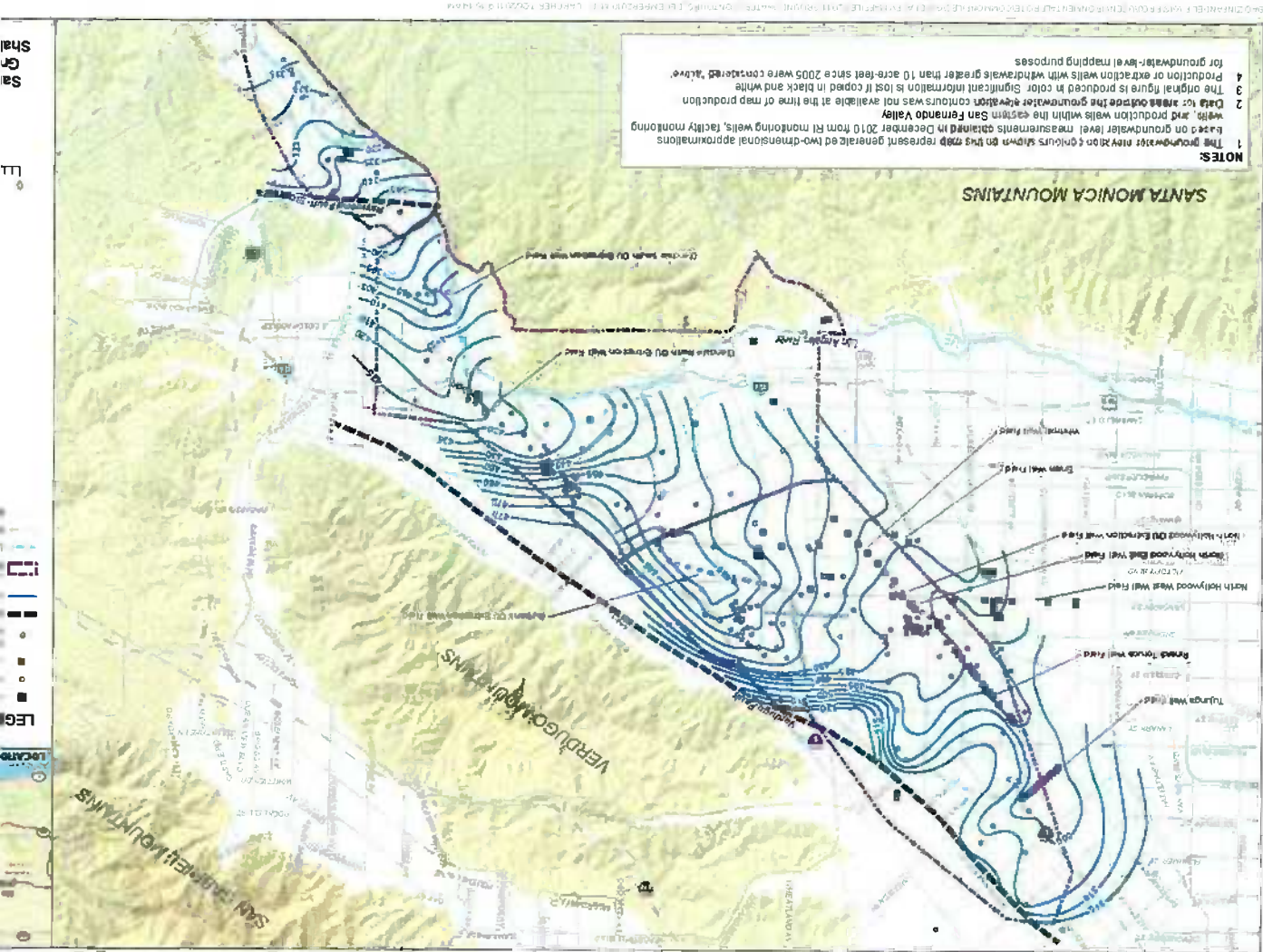
HR1305      September 2012

**Exhibit 3**

**Declaration of Eric Smalstig**

**ISO Second Petition**

Figure 3. Groundwater Elevation Contours December 2010 (CH2M Hill 2010).



**Exhibit 4**

**Declaration of Eric Smalstig**

**ISO Second Petition**



# California Regional Water Quality Control Board Los Angeles Region



Linda S. Adams  
Acting Secretary for  
Environmental Protection

320 West Fourth Street, Suite 200, Los Angeles, California 90013  
(213) 576-6600 • Fax (213) 576-6640  
<http://www.waterboards.ca.gov/losangeles>

Edmund G. Brown Jr.  
Governor

May 10, 2011

Mr. Alan Skobin  
Northridge Properties, LLC  
Galpin Motors

~~15505-B~~  
North Hills, California 91343

**SUBJECT: REQUIREMENT FOR TECHNICAL REPORT, PURSUANT TO CALIFORNIA WATER CODE SECTION 13267**

**CASE/SITE: 777 NORTH FRONT STREET, BURBANK, CALIFORNIA (FILE NO. 109.6162) - FORMER ZERO CORPORATION**

Dear Mr. Skobin:

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) is the public agency with primary responsibility for the protection of ground and surface water quality for all beneficial uses within major portions of Los Angeles and Ventura County, including the referenced site. To accomplish this, the Regional Board oversees the investigation and cleanup of unregulated discharges adversely affecting the State's water, authorized by the Porter-Cologne Water Quality Control Act (California Water Code [CWC], Division 7).

Regional Board staff has reviewed the technical information that indicates the extensive use of hexavalent chromium (Cr<sup>6</sup>) at the former Zero Corporation facility located at 777 North Front Street, Burbank, California from the 1960s to the 1990s. A review of the file contents shows an absence of adequate soil sampling data for Cr<sup>6</sup> concentrations in soils deeper than 5 ft. below grade.

Thus, we have determined that an additional investigation is warranted due to the historical use of Cr<sup>6</sup> at the aforementioned facility. The requirement for an additional investigation is further warranted by new information presented to the Regional Board from the California Department of Transportation (Caltrans) in a 2009 soil investigation report for the subject property that was prepared on behalf of Caltrans. The report indicates that there exist soil concentrations of Cr<sup>6</sup> in exceedance of normal background concentrations in the San Fernando Valley.

Enclosed is a Regional Board Order for technical report requirements pursuant to California Water Code section 13267 (Order).

The former responsible party, APW North America, received a Certificate of Completion from the Cal/EPA in 2002. This Regional Board is the administering agency of record and we have determined that the Certificate is no longer binding on the Regional Board. As stated above, the Regional Board has received new information. Pursuant to Health and Safety Code section 25264 (c) (4), we may reopen the investigation if a hazardous materials release is discovered at the site that was not subject of the prior site investigation. Also, section 25264 (c)(5) states that a site may be reopened if new facts causes the agency

*California Environmental Protection Agency*

Mr. Alan Skobin  
777 North Front Street, Burbank, California

- 2 -

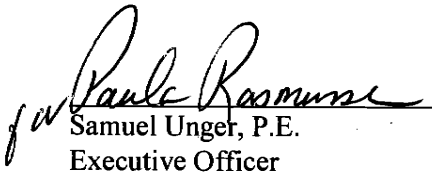
May 10, 2011

to find that further site investigation and remediation is required in order to prevent a significant risk to human health and safety or to the environment. The 2009 Caltrans report found that detectable concentrations of Cr<sup>6</sup> in soil samples exceed the typical background concentrations in the native soils in the Burbank area.

Therefore, as the current property owner, you are required to comply with the Order to prepare and submit a technical soil investigation work plan to conduct an onsite soil investigation for the purpose of characterizing the potential for Cr<sup>6</sup> groundwater contamination beneath the former facility.

If you have questions regarding this matter, please call Mr. Larry Moore at (213) 576-6730 ([lmoore@waterboards.ca.gov](mailto:lmoore@waterboards.ca.gov)), or Jeffrey Hu at (213) 576-6736 ([ghu@waterboards.ca.gov](mailto:ghu@waterboards.ca.gov)).

Sincerely,

  
Samuel Unger, P.E.  
Executive Officer

Enclosure:

1) General Requirements for a Heavy Metal Soils investigation

cc:

Ms. Lisa Hanusiak, USEPA Region IX  
Mr. Leighton Fong, City of Glendale  
Mr. Robert McKinney, Los Angeles Department of Water & Power  
Mr. Milad Taghavi, Los Angeles Department of Water & Power  
Mr. Bill Mace, City of Burbank Water Supply Department  
Mr. Richard Slade, ULARA Watermaster  
Mr. Donald Nanney, Esq. for Northridge Properties, LLC



-STATE OF CALIFORNIA

California Regional Water Quality Control Board - Los Angeles Region

**GENERAL WORKPLAN REQUIREMENTS**

**FOR A**

**HEAVY METAL SOIL INVESTIGATION**

**APPENDIX A**

**INTRODUCTION**

This guidance document and the related *Laboratory QC/QA Requirements for Title 22 Metals Analysis* are designed to assist dischargers required to perform a heavy metal soil assessment. This document outlines all activities to be conducted by the discharger in order to complete an assessment and determine whether the soil and/or groundwater have been contaminated due to industrial and/or commercial activities at the site. The requirements itemized below are to be used when conducting an initial heavy metal soil investigation to evaluate the following:

- A. Waste discharges to the soil at potential source areas,
- B. Assess and delineate the lateral and vertical extent of soil contamination, and
- C. Soil properties that affect contaminant mobility and transport in the unsaturated zone.

The work plan must include, but is not limited to, the following items:

1. A technical approach including the sampling rationale and justification for the location, depth, and type of boring including the sampling interval. The boring locations must be plotted on a facility map configured to scale.
2. The document must include the Los Angeles County Assessors Parcel Number(s) for the property being investigated.
3. **Soil samples must be collected from the middle of low permeability (silts and clays) or high moisture content units (saturated soils), if the individual lithologic unit is five feet thick or greater.**
4. Describe the proposed drilling method, equipment, and procedures for borings.
5. Describe equipment and procedures used for the collection, handling, storage, and shipment of soil samples.
6. Describe decontamination and waste handling procedures.
7. Describe the laboratory quality assurance/quality control program.
8. A site-specific Health and Safety Plan (HASP) should be prepared prior to fieldwork or field sampling startup. The HASP defines minimum health and safety requirements and

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<sup>1</sup> California Code of Regulations; Title 22 metals, including total and hexavalent chromium

designate protocols to be followed for the field operation to comply with state and federal health and safety requirements.

9. A time schedule for the completion of the scope of work.

## WORKPLAN FOR SUBSURFACE SOIL INVESTIGATION

A subsurface soil technical report (hereinafter work plan) will be required to assess the shallow subsurface soil to determine the impact of prior releases of heavy metal contaminants. Implementation of the work plan will determine the lateral and vertical extent of heavy metal soil contamination in the impacted areas identified.

The task of implementing the work plan involves selecting optimum boring locations within and around the source areas, collecting soil samples at depths of 1, 5, 10, 15, 20 and 25-feet below ground surface (bgs) and at every lithologic change. If not previously performed, at least one continuously cored soil boring should be drilled and logged for a complete stratigraphic column of the soils beneath the site, preferably in proximity to source area.

Unless previous data exists, at least two soil borings must be installed and sampled at two different locations away from known source areas to ascertain background heavy metal concentrations. These soil samples should be collected from "native soils" (not from areas of imported fill and preferably from areas that are the least likely to contain heavy metal residues due to historical operations at the facility).

Background heavy metal concentrations will be compared to values obtained from impacted areas to determine impact and will be used, along with other indices, to determine site-specific cleanup levels.

## IDENTIFICATION OF CONTAMINATED SOURCE AREAS AT HEAVY METAL USEAGE, STORAGE AND DISPOSAL AREA

- Identify the areas, based on the historical or current land use for the facility which where used for plating, chemical storage, processing, treatment and disposal.
- Identify potential source locations of heavy metal soil contamination, such as areas of former spills and leaks.
- Provide a labeled, surveyed, and scaled plot plan or diagram showing current, and any previous locations of structures used for heavy metal plating, chemical and hazardous waste storage, treatment and disposal at the facility.
- Identify locations such as aboveground tanks, vats, underground tanks, clarifiers, sumps, channels, pipelines, trenches, drains, sewer connections, seepage pits, basins, ditches, and dry wells.
- Include tables listing the functions or purposes of each structure, duration of use, chemical contents, and quantity of chemicals stored.
- If information is available on prior chemical spills provide the date of the spill, the reporting agency (i.e. Fire Department or Regional Board), and the extent of any remedial action performed.

Also list names, addresses, duration and dates of previous site owners and operators, and types of chemical-processes used.

## FIELD PROCEDURES

The following investigation procedures must also be addressed in the work plan at a minimum:

1. Contingency plan to extend boring depths if evidence exists of contamination at the bottom of the borehole.

During drilling and soil sampling, all the boring logs must be prepared by or under the direct supervision of a State of California Registered Geologist (RG), or Registered Civil Engineer (PE). In addition, visual indications of soil contamination must be noted such as staining, and discoloration, olfactory indicators, estimation, of percentages of the different soil types, range in grain sizes, degree of grading/sorting, moisture content, porosity. Unique sample identification and locations must be provided.

2. Provide complete and legible boring logs that will include:

- a) A description of earth materials, conditions (moisture, color, etc.), and classifications per Unified Soil Classification System (USCS);
- b) A lithographic column with USCS abbreviations and symbols;
- c) Labeled sample depths (measured in feet);
- d) A record of penetration in blows per foot (blow counts) and inches (or percent) of sample recovered;
- e) A California registered professional must sign each boring log.-

3. An appropriate number of quality control samples collected.

4. All the boreholes must be back-filled in accordance with requirements listed in *California Well Standards Bulletin 74-90, California Department of Water Resources, (June 1991)*.

5. Investigation-derived wastes must be disposed of in Department of Transportation approved containers, or transported to a US EPA approved waste management facility.

6. Following receipt of laboratory analytical results, submit a **technical report** (site investigation report) to the Regional Board for review and approval. The report must contain a description of field activities, procedures used, a discussion of analytical results and delineation of contaminants in the shallow soil, data interpretation, conclusions and recommendations. Boring logs, laboratory analytical results, and chain of custody forms should be included in the appendices. Figures must include a surveyed map showing the locations of the contaminant source areas or structures, a map showing surveyed soil sample and boring locations, and iso-concentration maps for significant contaminants discovered.

If the results of the site investigation have not fully delineated the contamination, then a work plan to completely define the extent of soil and/or groundwater impacts is to be included with your site investigation report pursuant to Section 13267 of the California Water Code.

Comply with the Regional Board's chain of custody procedures regarding soil samples. Samples must be handled and analyzed per the *General Requirements Laboratory OC/OA for Title 22 Heavy Metals Analysis* (APPENDIX B).

#### OPTIONAL SOIL PARAMETERS:

Additional soil data collection may be considered during site assessment and/or remediation phases for site-specific risk assessment and/or fate and transport modeling.

Soil samples shall be collected from different lithological units at various locations and depths, and sent to a California certified laboratory for determining the following parameters:

- (a) Water-Solid adsorption/distribution coefficient (Kd)
- (b) Fraction of organic carbon content (foe)
- (c) Grain-size distribution (ASTM D 422-630)
- (d) Effective soil porosity
- (e) pH (ASTM G51-77)
- (f) Bulk density or Specific Gravity (ASTM D 854-83)
- (g) Soil moisture content (ASTM D 2216-80)
- (h) Plasticity index for clayey and silty materials (Atterberg Limits)
- (i) Gas permeability (if possible).

#### LABORATORY METHOD FOR ANALYSES OF SOIL SAMPLES

For the purpose of screening soil samples for Title 22 heavy metal contaminants, the Regional Board will accept the use of EPA Method 6010B. However, for certain Title 22 metals of concern, EPA Method 6020 may be required to achieve meet the required detection limits for reporting. EPA Method 7199 and EPA Method 245.5 will be required to provide a quantitative value for hexavalent chromium, and mercury, respectively.

#### LABORATORY CERTIFICATION

The Regional Board requires that all laboratories performing analyses on any samples be certified by the California Department of Health Services' (DHS) Environmental Laboratory Accreditation Program (ELAP). For a listing of accredited laboratories refer to the DHS web site:

[http://www.dhs.ca.gov/ps/js/elap/ELAPnames/Laboratory\\_19.htm](http://www.dhs.ca.gov/ps/js/elap/ELAPnames/Laboratory_19.htm)

## **SPECIAL TRAINING REQUIREMENTS/CERTIFICATION**

All personnel working in the field or in the laboratory will hold current certification showing that they have received training in accordance with requirements specified in 29 CFR 1910.120 (Occupational Safety and Health [OSHA]) regulations, or any other regulatory training/certification requirements.

## **SURVEY DATA FOR SOIL DATA**

All soil data points (soil borings) shall be surveyed relative to longitude and latitude coordinates. Acceptable quality data may come from a commercially available, hand held global positioning system (GPS) device.

## **DOCUMENT SUBMITTAL REQUIREMENTS**

Deliverables and technical reports include, but are not limited to, work plans, work plan addenda, investigation reports, design reports, quarterly groundwater monitoring reports, report addenda, and letter responses to Regional Board comments. Site plans with proposed soil boring locations must be submitted in an AutoCADD or GIS format that can be input into a spatial or GIS database.

Electronic copies of reports may be submitted in Adobe PDF format via e-mail or, for those files that exceed 1 megabyte in size, on CD-ROM or floppy disk.

Parties shall submit paper and electronic copies of all deliverables and technical reports in the quantities indicated, to the following:

**2 paper copies, 1 electronic copy**

Mr. Larry Moore ([lmoore@waterboards.ca.gov](mailto:lmoore@waterboards.ca.gov))  
California Regional Water Quality Control Board,  
Los Angeles Region  
320 West 4th Street, Suite 200  
Los Angeles, CA 90013