### California Regional Water Quality Control Board

Los Angeles Region

Recipient of the 2001 Environmental Leadership Award from Keep California Beautiful



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Arnold Schwarzenegger

Governor

March 11, 2010

Mr. Daniel D. Crosser Comstock Crosser & Associates 321 12<sup>th</sup> Street, Suite 200 Manhatten Beach, CA 90266

Mr. Daniel Romano 264 South La Cienaga Blvd., Suite 1124 Beverly Hills, CA 90211

APPROVAL OF REVISED GROUNDWATER MONITORING PROGRAM UNDER AUGUST 2002 CLEANUP AND ABATEMENT ORDER (CAO) AND THE AUGUST 2007 WASTE DISCHARGE REQUIREMENTS (WDR) PERMIT FOR THE FORMER FAIRCHILD CONTROLS FACILITY, 1800 ROSECRANS AVENUE, MANHATTAN BEACH, CALIFORNIA (SCP CASE No. 348, SITE IDENTIFICATION NO. 1840900)

Dear Mr. Crosser and Mr. Romano:

California Regional Water Quality Control Board, Los Angeles Region is the lead agency responsible for regulatory oversight of subsurface investigations and cleanup of soil and groundwater contamination at the Former Fairchild Controls Facility located at 1800 Rosecrans Avenue, Manhattan Beach, California. You are currently monitoring groundwater under our Cleanup and Abatement Order (CAO) No. R4-2002-0082 dated August 23, 2002, and our Waste Discharge Requirements Order (WDR) No. R4-2007-0019 dated August 23, 2007. On January 5, 2010, Mr. Jerome Zimmerle of your consultant URS Corporation submitted a draft document on your behalf, requesting integration of the required groundwater monitoring programs under the two Regional Board Orders. On February 22, 2010, Regional Board staff received the *Proposed Revisions to Sampling Plan as Part of the August 2002 Cleanup and Abatement Order and the August 2007 Waste Discharge Requirements (WDR) Permit for the Subject Site,* dated February 19, 2010.

Since some volatile organic compounds (VOCs) and hexavalent chromium hot spots still remain in the groundwater plume, additional in-situ chemical injection(s) with Calcium polysulfide (CPS) and vegetable oil emulsion at the identified remaining hot spots were discussed and agreed during a meeting between Mr. Mohammad Zaidi of the Regional Board staff and Mr. Zimmerle on March 3, 2010. These hot spots are located at and around the locations of existing groundwater monitoring wells EW-7, GW-4, OB-8S, OB-3S/3D, OB-18S, OB-13S/13D, OB-6S/6D, OB-7S, OB-12S, MW-6, MW-10, and OB-16D. The new injection points are to be

California Environmental Protection Agency

Mr. Crosser & Mr. Romano Former Fairchild Controls Facility

located hydraulically upgradient of these hot spots; south of Rosecrans Avenue and along North-South (NS) alignments south of injection wells W-15, W-10, and W-5; and North of the Rosecrans Avenue along a NS alignment on 142<sup>nd</sup> Place to be located half-way between wells OB-8S and OB-3S. In addition, vegetable oil emulsion and/or CPS will be re-injected in some existing injection wells such as N-1, N-2, N-3, S-1, S-2, S-3, S-4, and S-5 located upgradient of the hot spots.

Based on our review of the proposed groundwater monitoring revision and additional in-situ chemical injection plan (agreed on March 3, 2010), we have integrated the Monitoring and Reporting Program under two Orders. You shall implement the revised groundwater monitoring plan in the enclosed revised Monitoring and Reporting Program (MRP) No. CI-9584. In addition, you are required to annually monitor the groundwater samples collected from the plume using hydropunch at specific locations where no monitoring well has been previously installed such as south of Rosecrans Avenue and along North-South (NS) alignments south of injection wells W-15, and W-10, and North of the Rosecrans Avenue along a NS alignment on 142<sup>nd</sup> Place half-way between wells OB-8S and OB-3S. Those groundwater samples obtained from hydropunches shall be subject to those chemical analyses in Table 1 and Table 2 of the enclosed MRP. All other provisions of your MRP remain in full force and effect. Also, the revised MRP will fulfill the groundwater monitoring requirements of the CAO No. R4-2002-0082.

Should you have any questions or comments about this letter, please contact the project manager Mr. Mohammad Zaidi at (213) 576-6732.

Sincerely,

Tracy J. Egoscue Executive Officer

cc:

Mr. Jerome R. Zimmerle, Jr., P.E., URS Corporation

Mr. Eric Winquist, 1800 Rosecrans Partners, LLC

Mr. Walter J. Lipsman, Morris, Polich & Purdy LLP

# STATE OF CALIFORNIA CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

#### MONITORING AND REPORTING PROGRAM NO. CI-9584 FOR

## 1800 ROSECRANS PARTNERS, LLC (FORMER FAIRCHILD CONTROLS FACILITY)

#### ENROLLMENT UNDER REGIONAL BOARD ORDER NO. R4-2007-0019 (Series No. 061) FILE NO. 1840900

#### I. REPORTING REQUIREMENTS

A. 1800 Rosecrans Partners, LLC (hereinafter Discharger) shall implement this monitoring program on the effective date of this enrollment (March 11, 2010) under Regional Board Order No. R4-2007-0019. The first monitoring report under this Program is due by April 15, 2010. Subsequent monitoring reports shall be received at the Regional Board by the dates in the following schedule:

#### Reporting Period

#### Report Due

January – March April – June July – September October – December April 15 (Quarterly)
July 15 (Quarterly, Semi-annual)
October 15 (Quarterly)
January 15(Quarterly, Semi-annual,

Annual)

- B. If there is no discharge or injection during any reporting period, the report shall so state. Monitoring reports must be addressed to the Regional Board, Attention: <u>Information Technology Unit.</u>
- C. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous monitoring events. In addition, the Discharger shall explain the compliance record and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements (WDRs).
- D. Each monitoring report shall contain a separate section titled "summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with WDRs. This section shall be located

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May 18, 2005 Revised: March 11, 2010

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at the front of the report and shall clearly list all non-compliance with discharge requirements, as well as all excursions of effluent limitations.

E. The Discharger shall comply with requirements contained in Section G of Order No. R4-2007-0019 "Monitoring and Reporting Requirements" in addition to the aforementioned requirements.

#### II. INJECTION MONITORING REQUIREMENTS

Calcium Polysulfide (CPS) and vegetable oil emulsion (as the Carbon Source) Injection:

In-situ chemical injections with CPS and vegetable oil emulsion shall be monitored through eight existing injection wells (N-1, N-2, N-3, S-1, S-2, S-3, S-4, and S-5), and new injection points/wells to be located hydraulically up-gradient of the hot spot wells - EW-7, GW-4, OB-8S, OB-3S/3D, OB-18S, OB-13S/13D, OB-6S/6D, OB-7S, OB-12S, MW-6, MW-10, and OB-16D. These new injection points/wells shall be reported and approved by the Regional Board Executive Officer (Executive Officer) prior to their use.

The quarterly, semi-annual, and annual reports shall contain the following information regarding the injection activities:

- 1. Location Map showing injection points for the calcium polysulfide and/or carbon source (vegetable oil emulsion) solution
- 2. Written summary defining:
  - Depth of injection points;
  - Quantity of calcium polysulfide/carbon source solution injected per injection point/well; and
  - Total amount and injection rate of calcium polysulfide and carbon source injected at site.
- 3. Monthly visual inspection at each injection point/well shall be conducted to evaluate the well casing integrity for a period of three months after each injection. The quarterly report shall include a summary of the visual inspection.
- 4. If there is no injection during any reporting period, the report shall so state.

#### III. GROUNDWATER MONITORING PROGRAM

The Discharger shall conduct on-site and off-site groundwater monitoring. Groundwater samples shall be collected and monitored in accordance with Table 1. In addition, the quarterly groundwater sampling shall include those constituents in Table 2.

		ADLE .	L: GRU	VUNDVV	AIEKI	MONTI			al Sem			ED FREQUENCIES Additional Annual					
			Qua	rterly	1	1	Weils/Analyses				Wells/Analyses						
WELL ID	Measure Water Level	VOCs, Freon 113, Oxygenates (EPA 8260B),	Hexavalent Cr (EPA Method 7199) and Total Cr (EPA 6010B)	General minerals, TOC, methane, arsenic, manganese, iron	1,4-Dioxane (GC/MS Isotope Dilution)	1,2,3-TCP (GC/MS low level 1,2,3-TCP)	VOCs, Freon 113, Oxygenates (EPA 8260B),	Hexavalent Cr (EPA Method 7199) and Total Cr (EPA 6010B)	General minerals, TOC, methane, arsenic, manganese, iron	1,4-Dioxane (GC/MS Isotope Dilution)	1,2,3-TCP (GC/MS low level 1,2,3-TCP)	VOCs, Freon 113, Oxygenates (EPA 8260B),	Hexavalent Cr (EPA Method 7199) and Total Cr (EPA 6010B)	General minerals, TOC, methane, arsenic, manganese, iron	1,4-Dioxane (GC/MS Isotope Dilution)	1,2,3-TCP (GC/MS low level 1,2,3-TCP)	
Former Fairchild Wells																	
EW-1S	1	1	1						1	1		ļ	ļ		<u> </u>	<u> </u>	
EW-2S	1	ļ					1	1									
MW-3S	1						1			1					<u> </u>	<u> </u>	
MW-4S	1																
MW-5S	1	1	<u> </u>							1			<u> </u>				
MW-5D	1											<u> </u>					
EW-6S	1	1	1						1	1							
MW-6D	1	1							1	ļ	1		ļ				
TEMP-1	1											1			1		
TEMP-2	1						1		<u> </u>						1		
TEMP-3	1	1	1							1							
EW-7S	1	1	1						1	1	1						
MW-8S	1	1	1						Ĺ	1							
OB-1	1						1										
OB-2	1																
OB-3S	1	1						1									
OB-3D	1	1															
OB-4S	1						1										
OB-5S	1											1					
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Т	ABLE	1: GR(	DUNDW	/ATER	MONIT	ORING	WELL	S AND	THEIR	REVISI	ED FRE	QUENC	IES (C	ontinu	ed)		
			Qua	rterly			A		al Sem Is/Anal		ıal		Additional Annual Wells/Analyses				
WELL ID	Measure Water Level	VOCs, Freon 113, Oxygenates (EPA 8260B),	Hexavalent Cr (EPA Method 7199) and Total Cr (EPA 6010B)	General minerals, TOC, methane, arsenic, manganese, iron	1,4-Dioxane (GC/MS Isotope Dilution)	1,2,3-TCP (GC/MS low level 1,2,3-TCP)	VOCs, Freon 113, Oxygenates (EPA 8260B),	Hexavalent Cr (EPA Method 7199) and Total Cr (EPA 6010B)	General minerals, TOC, methane, arsenic, manganese, iron	1,4-Dioxane (GC/MS Isotope Dilution)	1,2,3-TCP (GC/MS low level 1,2,3-TCP)	VOCs, Freon 113, Oxygenates (EPA 8260B),	Hexavalent Cr (EPA Method 7199) and Total Cr (EPA 6010B)	General minerals, TOC, methane, arsenic, manganese, iron	1,4-Dioxane (GC/MS Isotope Dilution)	1,2,3-TCP (GC/MS low level 1,2,3-TCP)	
OB-8S	1	1															
OB-8S (Dup)		1															
OB-8D	1											1					
OB-9S	1	. 1						1									
OB-10S	1						1										
OB-11S	1	1															
OB-11D	1											1					
OB-12S	_1_	1							1	1							
OB-13S	1	1											1				
OB-13D	1	1															
OB-14S	1	1															
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OB-19D OB-20S	1					<del> </del>	1	<u> </u>	1		- 1	<u> </u>			ļ		
Former Injection Wells	•						,						·				
0-1	1									1							
0-10	1					`				1							
0-13	1																
W-18	1	1									ļ	ļ		ļ	<u> </u>		
W-2	1	1	1			ļ			1			ļ <u></u>		·			
W-19														ļ			
N-2	_1_	1						ļ	-	<u>                                     </u>	ļ	ļ					
S-10 TRW Wells	1						· 1							,			
GW-4	. 1	1	1						1	1	1						
GW-4 (EB)		1	1														

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	Quarterly						WELLS AND THEIR REVISED FRE Additional Semi-Annual Wells/Analyses					Additional Annual Wells/Analyses				
	Measure Water Level	VOCs, Freon 113, Oxygenates (EPA 8260B),	Hexavalent Cr (EPA Method 7199) and Total Cr (EPA 6010B)	General minerals, TOC, methane, arsenic, manganese, iron	1,4-Dioxane (GC/MS Isotope Dilution)	1,2,3-TCP (GC/MS low level 1,2,3-TCP)	VOCs, Freon 113, Oxygenates (EPA 8260B),	Hexavalent Cr (EPA Method 7199) and Total Cr (EPA 6010B)	General minerals, TOC, methane, arsenic, manganese, iron	1,4-Dioxane (GC/MS Isotope Dilution)	1,2,3-TCP (GC/MS low level 1,2,3-TCP)	VOCs, Freon 113, Oxygenates (EPA 8260B),	Hexavalent Cr (EPA Method 7199) and Total Cr (EPA 6010B)	General minerals, TOC, methane, arsenic, manganese, iron	1,4-Dioxane (GC/MS Isotope Dilution)	1,2,3-TCP (GC/MS low level 1,2,3-TCP)
WELL ID GW-5	1						1									
GW-6A	1															
GW-7	1															
GW-11	1					-										
GW-11	1	-		<del></del>		<u></u>										
GW-14	1	<del> </del>														
GW-16	1						1									
GW-16 GW-21	1						- '		,							
GW-21				-												
GW-25	1															
Fairchild Industrie s wells	•															
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L-2	1															
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MW-1	1		ļ					ļ								
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MW-1	1															
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TDD-9	1_	<u> </u>	ļ	ļ	<u> </u>											
TDD-10 ARCO	1.															
Wells							-	-				1	-		<del> </del>	-
MW-6	1	1	1						1	1		-				
MW-7	1		<del> </del>								<b> </b>	-			<b> </b>	
MW-8	1						<u> </u>	<del> </del>		ļ	<u> </u>					
MW-9	1	1	<del> </del>				ļ	<u> </u>			<del> </del>					-
MW-10	70	33	14	0	0	0	11	4	12	13	-	4	1	0	2	0

1,2,3-TCP= 1,2,3-trichloropropane

GC/MS = gas chromatograph/mass spectrometry, TOC = total organic carbon

General Mineral Monitoring Constituent: Total dissolved solids, Sulfate, Sulfide, Boron, Chloride, NO2, NO3

In addition, the quarterly groundwater monitoring program shall include those constituents in Table 2:

Table -2 Analytical Parameters for Groundwater Monitoring								
CONSTITUENT	UNITS 1	TYPE OF	MINIMUM FREQUENCY OF					
		SAMPLE	<u>ANALYSIS</u>					
$pH^2$	pH units	grab	Quarterly <sup>3</sup>					
Temperature <sup>2</sup>	°F	grab	Quarterly <sup>3</sup>					
Oxidation-reduction potential <sup>2</sup>	millivolts	grab	Quarterly <sup>3</sup>					
Specific conductivity <sup>2</sup>	μmhos/cm	grab	Quarterly <sup>3</sup>					
Dissolved Oxygen <sup>2</sup>	μg/L	grab	Quarterly <sup>3</sup>					

- 1. μg/L: micrograms per liter; °F: degree Fahrenheit.
- 2. Accurately calibrated field instrument will be used to test for this constitue
- 3. Use groundwater monitoring frequencies as listed in Table 1.

These injection well and groundwater monitoring well sampling locations shall not be changed and any proposed change of monitoring locations shall be identified and approved by the Regional Board Executive Office (Executive Officer) prior to their use.

All groundwater monitoring reports must include, at a minimum, the following:

- a. Well identification, date and time of sampling;
- b. Sampler identification, and laboratory identification:
- c. Quarterly observation of groundwater levels, recorded to 0.01 feet mean sea level; and
- d. Analytical results of the groundwater samples collected along with the laboratory data reports; iso-concentration contour maps of primary contaminants in the groundwater plume; and groundwater flow direction.

#### IV. MONITORING FREQUENCIES

Specifications in this monitoring program as given in Tables 1, and 2, are subject to periodic revisions. Monitoring requirements may be modified or revised by the Executive Officer based on review of monitoring data submitted pursuant to this Order. Monitoring frequencies may be adjusted to a less frequent basis or parameters and locations dropped by the Executive Officer if the Discharger makes a request and the request is backed by statistical trends of monitoring data submitted.

#### V. CERTIFICATION STATEMENT

Each report shall contain the following completed declaration:

"I certify under penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Executed	on the	day of	at	•
		(Signa	ature)	
				(Title)"
documents ar office of the Region, upon	nd will be Californ request	made available ia Regional Wa by interested pa	for inspection during territories during the control of the contro	this Order are public ng business hours at the ol Board, Los Angeles rietary information, and offidential.
Ordered by:	-	Egoscue ve Officer	Da	te: <u>March 11, 2010</u>

