

Pollution Limit Exceedances in Surface Water Runoff from SSFL and Perchlorate in Simi Valley Wells

By Pauline Velas and Jennifer Herrera

SSFL Water Pollution Exceedances

2008-2014 (First Quarter)

Outfall	Number of Exceedances
Outfall 1	41
Outfall 2	27
Outfall 4	7
Outfall 6	5
Outfall 8	8
Outfall 9	38
Outfall 10	7
Outfall 11	23
Outfall 12	4
Outfall 13	6
Outfall 14	5
Outfall 18	16
Outfall 19	3
Arroyo Simi Receiving Water	26

Total Exceedances: 216

On average this
is **35**
exceedances
per year

About
3 DOZEN
EXCEEDANCES PER
YEAR

SSFL Water Pollution Exceedances

2008-2014 (First Quarter)

Contaminant	Number of Exceedances
Iron	33
Iron (Mass/Day)	3
Fluoride	1
Dioxin (TCDD-TEQ)	50
Dioxin (TCDD-TEQ) (Per Month)	6
Dioxin (TCDD-TEQ) (w/o DNQ values)	2
Dioxin (TCDD-TEQ) (Mass/Day)	8
Chloride	3
Zinc	3
Zinc (Per Month)	1
Nitrate as Nitrogen	1
Nitrate + Nitrite	2
Total Residual Chlorine	4
Total Residual Chlorine (Per Day)	2

Manganese	20
Lead	27
Lead (Per Month)	5
Bis Phthalate	1
pH (Field)	9
Chronic Toxicity	1
Cadmium	2
Copper	2
Copper (Per Month)	2
Chromium	1
Total Dissolved Solids	1
Gross Alpha	1
E. Coli	11
E. Coli Geometric Mean	3
Fecal Coliform	8
Fecal Coliform Geometric Mean	3

Total Exceedances: 216



SSFL Water Pollution Exceedances

2008-2014 (First Quarter)

Outfall	Number of Exceedances
Lead (Daily Max)	27
Lead (Per Month)	5

Total Exceedances: 32

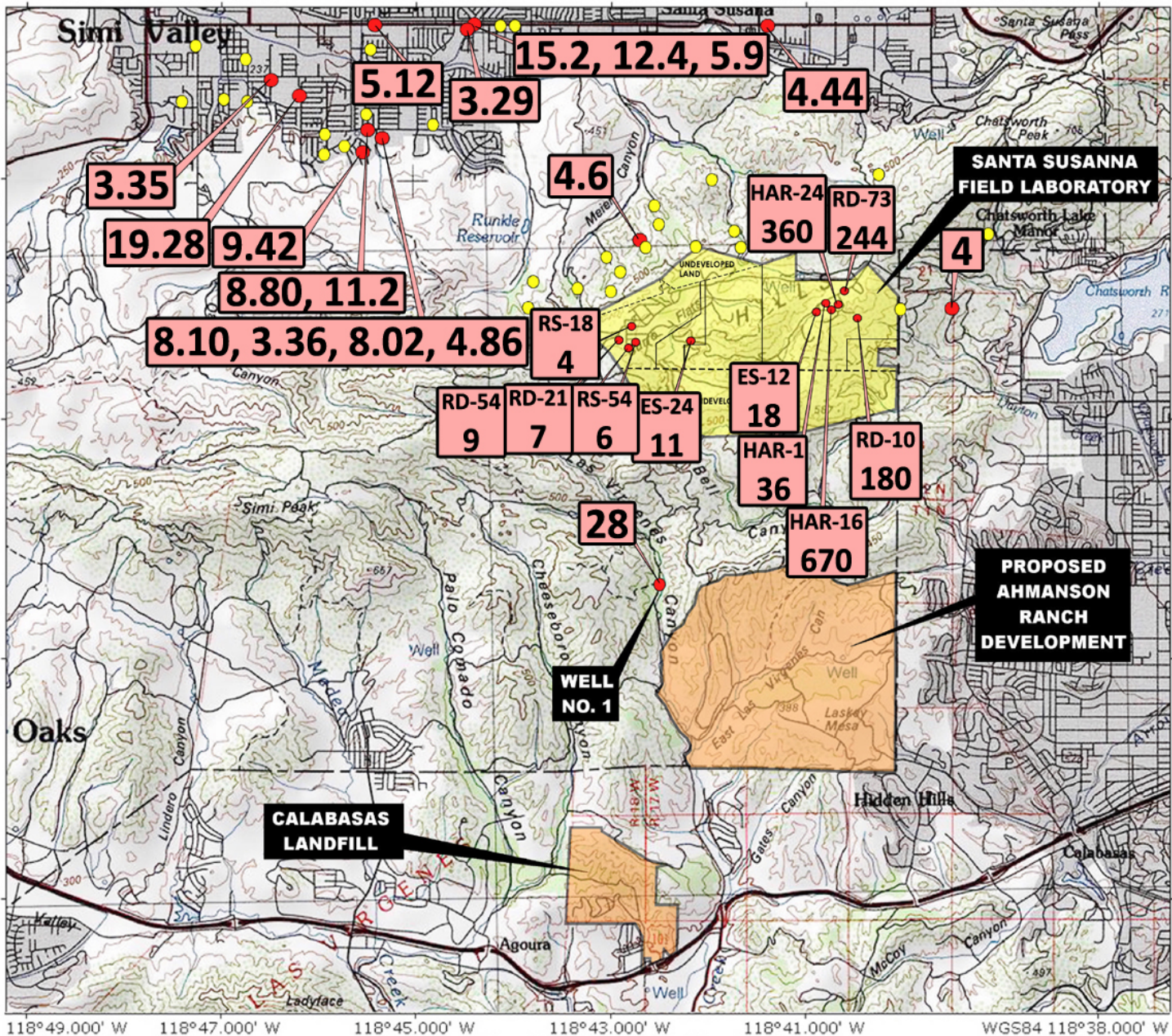


SSFL Water Pollution Exceedances

2008-2014 (First Quarter)

Outfall	Number of Exceedances
Dioxin (TCDD-TEQ) (Daily Max)	50
Dioxin (TCDD-TEQ) (w/o DNQ values) (Daily Max)	2
Dioxin (TCDD-TEQ) (Per Month)	6
Dioxin (TCDD-TEQ) (Mass/Day)	8
Total Exceedances:	66

DIOXIN WAS
DETECTED AT UP TO
500 TIMES
THE PERMIT LIMIT



- SAMPLE LOCATIONS
- SAMPLE LOCATIONS W/PERCHLORATE DETECT

4.44 PERCHLORATE CONCENTRATIONS (ppb)

ALL SAMPLE LOCATIONS ARE APPROXIMATE

Printed from TOPO! ©2000
Wildflower Productions (www.topo.com)

Perchlorate concentrations for
water samples with higher than
detection limit concentrations
obtained from the Happy Valley
Outfall 8

(Source of Data: Los Angeles Regional
Water Quality Control Board Files)
Years 1998-2003

Sampling Date	Perchlorate Concentrations (µg/L)
3/98	20
5/98	35.1
5/98	22
5/98	28.3
5/98	8.24
2/00	16
3/00	13
3/00	17
3/00	8.2
4/00	9.4
1/01	8

Sampling Date	Perchlorate Concentrations (µg/L)
2/01	5.5
2/01	4.2
3/01	5.3
3/01	4.9
3/01	5.2
3/01	4.8
2/03	4.7
2/03	12
3/03	5.3

DATE: 04/30/14
REPORT: R-040/2-3

STATE OF CALIFORNIA
DRINKING WATER PROGRAM

PAGE: 5

DRINKING WATER ANALYSES RESULTS REPORT
ALL SAMPLES FOR ALL CHAPTER 15 CONSTITUENTS - ALL RESULTS
FOR SAMPLE DATE RANGE OF 20040101 THRU 20140430
REPORT OF COUNTY: 56 VENTURA

SYSTEM NO: 5610059 NAME: GOLDEN STATE WATER COMPANY - SIMI COUNTY: VENTURA
SOURCE NO: 001 NAME: SYCAMORE WELL 03 PSCODE: 5610059-001 CLASS: LARG STATUS: AR

GROUP IDENTIFICATION		SAMPLE					
CONSTITUENT IDENTIFICATION		DATE	RESULT *	MCL	DLR	TRIGGER	UNIT
A-031	PERCHLORATE	10/18/2006	4.0000 *	-----	4.0000	4.0000	UG/L
A-031	PERCHLORATE	04/11/2007	4.3000 *	-----	4.0000	4.0000	UG/L
A-031	PERCHLORATE	10/15/2008	4.5000 *	6.0000	4.0000	4.0000	UG/L
A-031	PERCHLORATE	04/08/2009	4.1000 *	6.0000	4.0000	4.0000	UG/L
A-031	PERCHLORATE	07/01/2009	4.6000 *	6.0000	4.0000	4.0000	UG/L
A-031	PERCHLORATE	01/06/2010	5.2000 *	6.0000	4.0000	4.0000	UG/L
A-031	PERCHLORATE	04/07/2010	4.7000 *	6.0000	4.0000	4.0000	UG/L

Perchlorate detected
in Sycamore Well

4.0 $\mu\text{g}/\text{L}$

October 18, 2006

Perchlorate detected
in Sycamore Well

4.3 $\mu\text{g}/\text{L}$

April 11, 2007

Perchlorate detected
in Sycamore Well

4.5 $\mu\text{g}/\text{L}$

October 15, 2008

Perchlorate detected
in Sycamore Well

4.1 $\mu\text{g}/\text{L}$

April 8, 2009

Perchlorate detected
in Sycamore Well

4.6 $\mu\text{g/L}$

July 1, 2009

Perchlorate detected
in Sycamore Well

5.2 $\mu\text{g}/\text{L}$

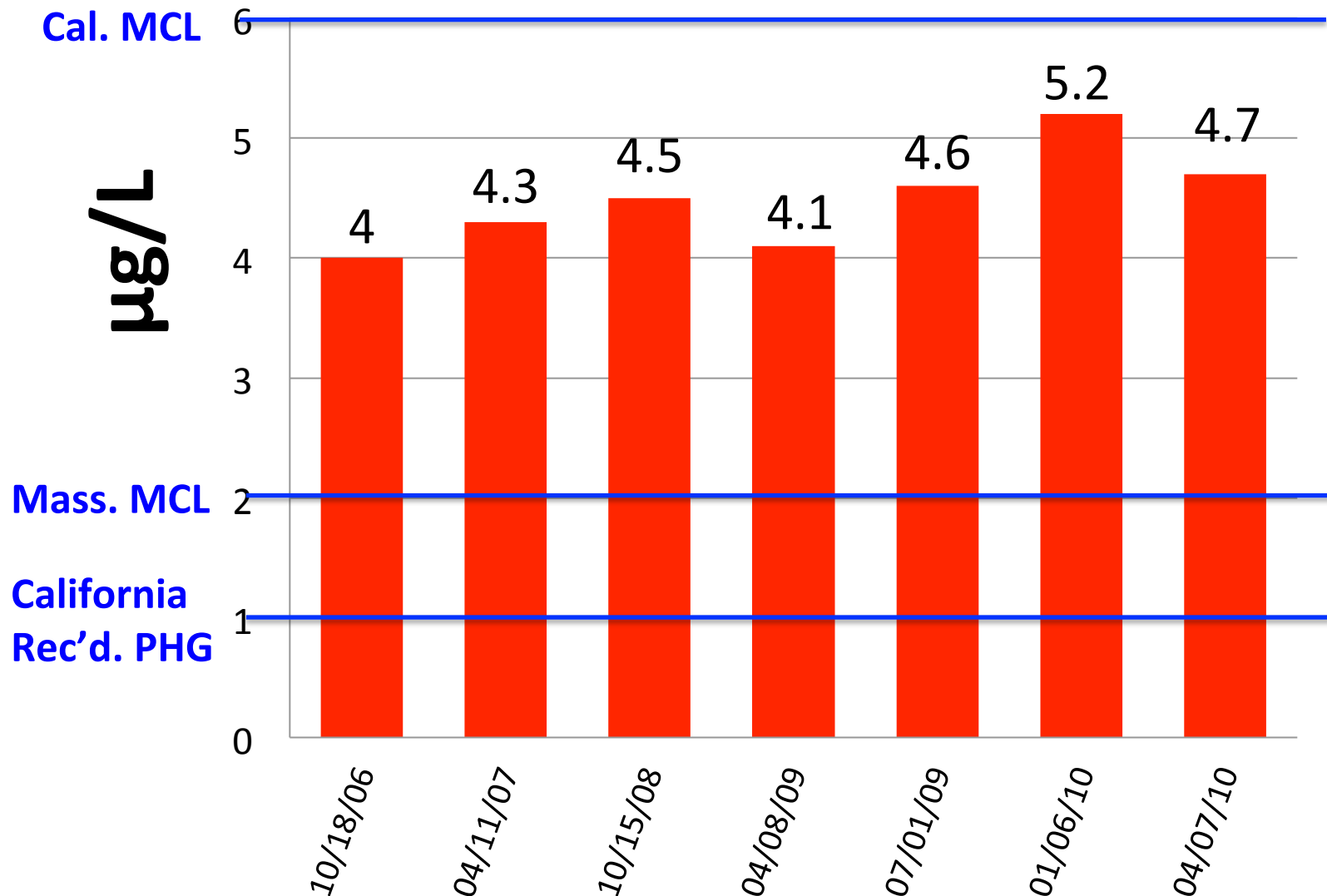
January 6, 2010

Perchlorate detected
in Sycamore Well

4.7 $\mu\text{g/L}$

April 7, 2010

Perchlorate Found in Sycamore Well, Simi Valley



76 other findings
below detection limit

Conclusion

Contaminants have migrated
from SSFL

216 times

Perchlorate found in monitoring
and drinking water wells in
Simi Valley