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By Alameda County Environmental Health 8:52 am, Dec 30, 2015

**Semi-Annual Self-Monitoring Report  
Oro Loma Sanitary District  
Special Wastewater Discharge Permit No. SDP-2014100**

**15101 Freedom Avenue  
San Leandro, California**

**December 29, 2015**

**Project 2554**

**Prepared for**

**Mr. Mohammad Pazdel  
1770 Pistacia Court  
Fairfield, California**




ENVIRONMENTAL ENGINEERING, INC.

6620 Owens Drive Suite A Pleasanton CA 94588 Ph: 925.734.6400 F: 925.734-6401 [www.somaenv.com](http://www.somaenv.com)

## PERJURY STATEMENT

Site Location: 15101 Freedom Avenue, San Leandro, California

"I declare under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge".

  
Mohammad Pazdel  
1770 Pistacia Court  
Fairfield, California 94533  
Responsible Party

## CERTIFICATION

SOMA Environmental Engineering, Inc. has prepared this report on behalf of Mr. Mohammad Pazdel for the property located at 15101 Freedom Avenue, San Leandro, California, to comply with Oro Loma Sanitary District Special Wastewater Discharge Permit requirements.



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Mansour Sepehr, PhD, PE  
Principal Hydrogeologist



December 29, 2015

Mr. Rodney Smith  
Oro Loma Sanitary District  
2655 Grant Avenue  
San Lorenzo, California 94580

Re: Oro Loma Sanitary District  
Special Wastewater Discharge Permit # SDP-2014100  
15101 Freedom Ave, San Leandro, California

Dear Mr. Smith:

This report fulfills quarterly requirements established by Oro Loma Sanitary District for discharge of groundwater to the sewer main at the above-referenced site.

#### Operation of the Groundwater Treatment System

SOMA received approval from Oro Loma Sanitary District to begin discharging treated groundwater into the on-site sewer main on May 4, 2009. This permit was recently renewed, effective May 5, 2014. A copy of Discharge Permit Number SDP-2014100, is attached as Appendix A. The groundwater extraction and treatment system (GWETS) started operation on December 9, 2009. The GWETS treats groundwater extracted from the extraction wells EX-1 and EX-2 and also during the multi-phase extraction (MPE) events. During the current reporting period an MPE event was conducted at the site from November 19 to December 18, 2015.

The extracted groundwater is treated through two units of granular activated carbon (GAC). The first unit is a 1,000 gallon tank filled with 2,000 lb of coconut husk charcoal. The second unit, connected in series, is a 55 gallon tank filled with 200 lb of coconut husk charcoal. The second unit is also called polishing unit. This unit was replaced on June 16, 2014 because of a leak at the base of the drum.

Since the startup of treatment system, approximately 3,852,413 gallons of extracted groundwater has been treated and discharged (as of December 23, 2015) through the remedial system to the site sewer main. The amount of groundwater discharged to date includes groundwater extracted during the MPE events.

The first week sampling was conducted on October 8, 2009 upon startup of the treatment system. Since then, monthly sampling of the treatment system effluent has been conducted as required by the discharge permit. All effluent

concentrations have been within the permissible discharge limits during this reporting period. Table 1 summarizes the laboratory analysis results for the current and previous reporting periods.

### Future Projected Issues

SOMA will implement the following action items.

- Continuing regular maintenance and monitoring of the remedial system.
- Periodic carbon change-outs based on system concentration levels.

Since startup, operation of the remedial system has been effective.

If you have any questions or comments, please do not hesitate to call me at (925) 734-6400.

Sincerely,



Mansour Sepehr, PhD, PE  
Principal Hydrogeologist

cc: Mr. Mohammad Pazdel



# TABLE

**Table 1**  
**Effluent Chemical Analytical Results**  
**and Operational History of Remediation System**  
15101 Freedom Ave, San Leandro, CA

Date	Volume (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	COD (mg/L)	TSS (mg/L)	pH
<b>2009</b>											
8-Oct-2009	15,351	<50	120 <sup>Y</sup>	NA	NA	NA	NA	NA	NA	NA	NA
19-Nov-2009	8,287	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.7
9-Dec-2009	0	Installation of GWETS									
16-Dec-2009	20,000	<50	<50	<300	<0.5	0.65 C	<0.5	0.84 C	<10	<5	7.4
<b>2010</b>											
18-Jan-2010	215,453	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.4
15-Feb-2010	297,560	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	11	<5	6.7
15-Mar-2010	475,245	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5.0	6.5
19-Apr-2010	621,180	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	8	6.6
17-May-2010	705,770	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	8	6.7
16-Jun-2010	825,200	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	17	9	6.8
19-Jul-2010	910,652	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	8	6.6
16-Aug-2010	939,935	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	6	6.6
28-Sep-2010	970,450	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	10	6.8
26-Oct-2010	1,013,700	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.2
15-Nov-2010	1,052,591	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.5
7-Dec-2010	1,100,492	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	6	6.6
<b>2011</b>											
11-Jan-2011	1,179,075	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	12	6	6.6
10-Feb-2011	1,249,569	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.6
14-Mar-2011	1,336,784	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.5
11-Apr-2011	1,364,272	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	6	6.5
10-May-2011	1,466,472	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	12	7	6.6
7-Jun-2011	1,532,263	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	6	6.6

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28-Jul-2011	1,573,295	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	5	6.3
25-Aug-2011	1,613,935	77	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.1
23-Sep-2011	1,631,273	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.7
27-Oct-2011	1,642,277	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	7	7.1
18-Nov-2011	1,676,170	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.8
1-Dec-2011	1,694,889	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.97
<b>2012</b>											
19-Jan-2012	1,715,163	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.02
23-Feb-2012	1,794,185	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.98
20-Mar-2012	1,803,832	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	7	7.02
17-Apr-2012	1,876,439	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.95
29-May-2012	1,900,111	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.89
11-Jun-2012	1,914,130	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	7.1
12-Jul-2012	1,943,456	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	7.3
17-Aug-2012	1,955,438	<50	<52	<310	<0.5	<0.5	<0.5	<0.5	NA	NA	7.04
17-Sep-2012	1,979,852	<50	<54	<330	<0.5	<0.5	<0.5	<0.5	NA	NA	7.02
23-Oct-2012	1,989,022	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.95
12-Nov-2012	1,995,170	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.90
4-Dec-2012	2,024,040	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.86
<b>2013</b>											
7-Jan-2013	2,099,002	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	7.01
14-Feb-2013	2,186,595	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	7.08
14-Mar-2013	2,193,121	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.98
12-Apr-2013	2,198,793	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.83
10-Jun-2013	2,273,686	<50	<58	<350	<0.5	<0.5	<0.5	<0.5	NA	NA	6.91



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5-Jul-2013	2,282,444	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.87
15-Aug-2013	2,403,250	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.64
24-Sep-2013	2,449,583	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.59
28-Oct-2013	2,551,538	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.71
14-Nov-2013	2,665,016	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.53
6-Dec-2013	2,770,675	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.44
<b>2014</b>											
9-Jan-2014	2,884,292	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.49
18-Feb-2014	2,953,173	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.66
14-Mar-2014	2,977,698	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.58
17-Apr-2014	3,035,679	89 Y	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.60
15-May-2014	3,054,723	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.19
16-Jun-2014	55-Gallon polishing drum replaced due to leak										
17-Jun-2014	3,070,826	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.74
21-Jul-2014	3,136,493	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.92
13-Aug-2014	3,229,086	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.50
9-Sep-2014	3,360,607	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.44
13-Oct-2014	3,431,247	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.39
18-Nov-2014	3,504,809	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.51
8-Dec-2014	3,544,218	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.65
<b>2015</b>											
13-Jan-2015	3,560,504	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.44
9-Feb-2015	3,560,780	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.22
20-Mar-2015	3,560,801	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.38
15-Apr-2015	3,575,395	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.40
21-May-2015	3,577,714	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.29
4-Jun-2015	3,580,407	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.66
14-Jul-2015	3,629,420	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.34
18-Aug-2015	3,672,646	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.21
23-Sep-2015	3,708,165	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.32

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27-Oct-2015	3,753,333	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.50
19-Nov-2015	3,782,192	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.43
<b>14-Dec-2015</b>	<b>3,829,993</b>	<b>&lt;50</b>	<b>&lt;50</b>	<b>&lt;300</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>NA</b>	<b>NA</b>	<b>6.63</b>

Note:

NA: Not Available/Not Applicable

< : Less than Laboratory-reporting limit

Y: Sample exhibits chromatographic pattern which does not resemble standard

In October and November 2009 discharge occurred only during MPE events

GWETS and totalizer installed in December 2009.

Week # 1 sampling conducted on Oct 8, 2009

C: Presence confirmed, but RPD between column exceeds 40%

Volume discharged during the October 2009 MPE event was 18,669 gallons

Volume discharged during the November 2009 MPE event was 10,507 gallons

Volume discharged during the December 2009 MPE event was 20,298 gallons

Volume discharged during the February 2010 MPE event was 6,339 gallons

Volume discharged during the March 2010 MPE event was 3,810 gallons

Volume discharged during the June 2010 MPE event was 15,600 gallons

Volume discharged during the August 2010 MPE event was 1,421 gallons

Volume discharged during the October 2010 MPE event was 13,282 gallons

SOMA ceased COD and TSS testing based on a request from OLSD dated April 5, 2012

# **APPENDIX A**

## Oro Loma Sanitary District Wastewater Discharge Permit

# ORO LOMA SANITARY DISTRICT

## WASTEWATER DISCHARGE PERMIT

Company Name: **SOMA ENVIRONMENTAL ENGINEERING INC.**

Mailing Address: **6620 Owens Drive, Suite A  
Pleasanton, CA 94588**

Facility Address: **15101 Freedom Ave.  
San Leandro, CA 94578**

Discharge Description: **Treated Contaminated Ground Water**

The above named company is authorized to discharge wastewater to the Oro Loma Sanitary District sewerage system subject to compliance with the District's Ordinance No. 39 (as amended) and any Federal or State regulations that apply, all permit conditions set forth in this permit, and payment of fees and charges when billed.

This permit is granted in accordance with the application filed on March 12, 2014 in the office of the Oro Loma Sanitary District and in conformity with specifications and information submitted to the District in support of the above referenced application.

Permit No.: **SDP-2014100**      Effective Date: **May 5, 2014**

Expiration Date: **May 4, 2016**

Approved By:   
**General Manager**

3-27-14  
**Date**