

Lehigh Southwest Cement Company

Permanente Plant  
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January 15, 2009

Submitted via electronic mail: No hardcopy to follow

Mr. Brian Wines  
**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, California 94612

Subject: **Self-Monitoring Reports - Sewage Treatment Plant  
For October 2008 through December, 2008**

*Handwritten note in a box:*  
LH RW  
QTR 2008

Mr. Wines:

The Lehigh Permanente Cement (formerly Hanson and Kaiser Cement) Wastewater Reclamation Facility's Quarterly Self-Monitoring Report is attached for your information and review. This report follows the Technical Report format as submitted to the Regional Water Quality Control Board on the Kaiser Cement wastewater treatment plant in 1993 and 1994. The following reports are attached:

- Table 1; Schedule for Sampling, Measurements and Analysis.
- Table 3-2, Hanson Permanente Cement Wastewater Reclamation Measurement & Analysis Results:
  - 5 weeks, September 30 through October 31, 2008 by week.
  - 4 weeks, November 1 through November 30, 2008 by week.
  - 5 weeks December 1 through December 31, 2008 by week
- Alpha Analytical Laboratories Reports: 14 Reports - Weekly  
Sampled September 30 through December 31, 2008.

Pursuant to Section III.2.A. of the Self-Monitoring Program included with Order 94-038, the following describes certain variations from the water reclamation requirements that occurred during the reporting periods and actions taken to correct these conditions.

**Variations from Requirements of the Self-Monitoring Program:**

No variances this month from requirements of the Self-Monitoring Program..

**Missing Data:**

No missing Information.

**Variations from Water Quality Limits:**

Results Outside of Established Limits:

*Handwritten notes:*  
{ Full copy in electronic format }  
Partial Copy  
BDA Review

- The Total Coliform levels in the treated wastewater did not exceed the limit of “240 MPN/100 ml for 2 consecutive readings” this quarter. The mean limit of “<23 MPN/100 ml for 7 consecutive readings” was exceeded 4 times during the quarter. The mean was 59 to 56 MPN/100 ml for the last 3 weeks in December.
- All other results were within the established limits. In addition, none of the prohibitions listed in Section B or the Order were violated

Variance Explanation:

- We believe that the cause of the variances was due to ineffective disinfection.
- The mean limit for coliform was exceeded in early December as a result of one high coliform (300 MPN/100ml) reading.

Actions Taken to Address Variance:

- The chlorination system is monitored daily to ensure operation. The chemical feed rate and residual are being adjusted to determine optimum dosing rate.
- Use of reclaimed water, in tanker trucks for dust control, has been discontinued until water treatment operations return to normal and stable conditions.

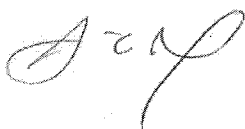
**Improvements:**

- A new flow meter has been functioning well and reflects better measurement of daily flow volumes.
- A new sodium hypochlorite day tank has been installed at the site. The existing chemical injection pump has been determined to have an internal mechanical problem. In late December, the pump was returned to the manufacturer for diagnosis. Chlorine tablets have continued to be the method of chlorination while the pump is being evaluated.

Please contact me at (408) 996-4262 if you have any questions. The reports attached are certified as follows:

"I certify under penalty of law that this document and all attachments are 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 managed 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 fine and imprisonment for knowing violations. [40 CFR 122.22(d)]"

Sincerely,



Scott Renfrew  
Environmental Manager

Attachments

cc: Henrik Wesseling, LSWCC

Table 1

**Schedule for Sampling, Measurements, and Analysis  
 Lehigh Permanente Cement Facility – Water Reclamation  
 Order No. 94-038**

Sampling Stations	E-1	E-2	All I	All P
<i>Type of Sample</i>	Cont.	Grab	Obs.	Obs.
Flow Rate (gallons/day)	3/w			
Total Coliform (MPN/100 ml)		2/m		
Turbidity (NTU)		W		
BOD, 20°C (mg/l)		2/m		
Total Suspended Solids (mg/l)		2/m		
Dissolved Oxygen (mg/l)		W		
Dissolved Sulfides (mg/l) (if DO < 1 mg/l)		W		
pH (units)		W		
Chlorine Residual (mg/l)		2/m		
Applicable Standard Observations			2/m	2/m

*Legend for Table 1*

**Type of Sample**

Grab = Instantaneous grab sample  
 Cont. = Continuous monitoring  
 Obs. = Observation

**Sampling Frequency**

3/w = three times per week  
 w = weekly  
 2/m = twice per month

**Table 3-2  
 Lehigh Permanente Cement Wastewater Reclamation  
 Measurements and Analysis Results  
 Sample Locations Station E-1 (continuous) E-2 (grab)**

Sample Type*	Week 1 Date: September 30, 2008	Week 2 Date: October 7, 2008	Week 3 Date: October 14, 2008	Week 4 Date: October 21, 2008	Week 5 Date: October 28, 2008
Total Coliform (MPN/100ml, Limit < 23 median for last 7 readings or < 240 for 2 consecutive samples.) 2/month  Sample Reading:  Median, last 7 Readings:	Time: 14:40	Time: 15:10	Time: 14:55	Time: 15:10	Time: 15:00
	<2	<2	4	<2	<2
	16	15	4	4	4
Turbidity (NTU) 1/week	5.4	17	4.8	13	7
BOD, 5-day, 20°C (mg/l, Limit < 30) 2/month	<5	28	5	<5	<5
Total Suspended Solids (mg/l, Limit < 30) 2/month	2.2	17	1.3	11	2.9
Dissolved Oxygen (mg/l, Limit > 1.0) 1/week	9.4	10	9.7	10	10
Dissolved Sulfides (mg/l, Limit < 0.1) 1/week (if DO < 1)	<0.5	<0.5			
pH (units, no limits) 1/week	7.4	7.6	7.7	7.6	7.6
Chlorine Residual (mg/l, Limit determined by flow rate) 2/month	1.2	0.6	<0.1	1.2	0.85
Flow Rate (gal/min) 3/week	10/1	10/6	10/14	10/20	10/27
	4.3	3.3	3.3	3.3	3.3
Flow Rate (gal/min) 3/week	10/2	10/8	10/15	10/21	10/28
	5.6	3.3	5.6	3.3	3.3
Flow Rate (gal/min) 3/week	10/3	10/9	10/17	10/23	10/31
	4.3	4.3	3.3	4.3	5.6

Distribution: San Francisco Bay California Regional Water Quality Control Board (quarterly), Lehigh Permanente Cement and Environmental Affairs (monthly).

\* Lab sheets attached for off-site analysis.

**Table 3-2  
 Lehigh Permanente Cement Wastewater Reclamation  
 Measurements and Analysis Results  
 Sample Locations Station E-1 (continuous) E-2 (grab)**

Sample Type*	Week 1 Date: November 4, 2008	Week 2 Date: November 12, 2008	Week 3 Date: November 18, 2008	Week 4 Date: November 25, 2008	Week 5 Date:
Total Coliform (MPN/100ml, Limit < 23 median for last 7 readings or < 240 for 2 consecutive samples.) 2/month	Time: 14:50	Time: 16:00	Time: 12:35	Time: 14:55	Time:
Sample Reading:	<2	22	<2	<2	
Median, last 7 Readings:	2	5	5	5	
Turbidity (NTU) 1/week	10	6.6	7.9	7.7	
BOD, 5-day, 20°C (mg/l, Limit < 30) 2/month	8	<5.0	<5.0	5	
Total Suspended Solids (mg/l, Limit < 30) 2/month	<1.0	7.5	9.3	1.4	
Dissolved Oxygen (mg/l, Limit > 1.0) 1/week	10	9.2	8.6	9.4	
Dissolved Sulfides (mg/l, Limit < 0.1) 1/week (if DO < 1)	<0.1			<1.0	
pH (units, no limits) 1/week	7.4	7.4	7.5	7.4	
Chlorine Residual (mg/l, Limit determined by flow rate) 2/month	0.4	<0.1	0.2	1.4	
Flow Rate (gal/min) 3/week	11/3 4.3	11/10 3.3	11/17 3.3	11/24 3.3	
Flow Rate (gal/min) 3/week	11/4 4.3	11/11 4.3	11/19 5.6	11/25 3.3	
Flow Rate (gal/min) 3/week	11/7 3.3	11/13 3.3	11/20 4.3	11/28 2.6	

Distribution: San Francisco Bay California Regional Water Quality Control Board (quarterly), Lehigh Permanente Cement and Environmental Affairs (monthly).  
 \* Lab sheets attached for off-site analysis.

**Table 3-2**  
**Lehigh Permanente Cement Wastewater Reclamation**  
**Measurements and Analysis Results**  
**Sample Locations Station E-1 (continuous) E-2 (grab)**

Sample Type*	Week 1 Date: December 2, 2008	Week 2 Date: December 9, 2008	Week 3 Date: December 16, 2008	Week 4 Date: December 23, 2008	Week 5 Date: December 30, 2008
Total Coliform (MPN/100ml, Limit < 23 median for last 7 readings or < 240 for 2 consecutive samples.) 2/month Sample Reading: Median, last 7 Readings:	Time: 15:35	Time: 13:40	Time: 16:30	Time: 15:30	Time: 14:15
	80	300	<2	4	2
	16	59	59	59	56
Turbidity (NTU) 1/week	5.4	13	12	17	14
BOD, 5-day, 20°C (mg/l, Limit < 30) 2/month	8	<5	<5	7	6
Total Suspended Solids (mg/l, Limit < 30) 2/month	3.6	8.5	8.3	3.4	8.4
Dissolved Oxygen (mg/l, Limit > 1.0) 1/week	9.4	9.8	10	10	11
Dissolved Sulfides (mg/l, Limit < 0.1) 1/week (if DO < 1)			<0.1	<0.1	<0.1
pH (units, no limits) 1/week	7.6	7.6	7.2	7.6	7.6
Chlorine Residual (mg/l, Limit determined by flow rate) 2/month	<0.1	0.3	<0.1	<0.1	<0.1
Flow Rate (gal/min) 3/week	12/2	12/10	12/16	12/22	12/29
	3.3	5.6	3.3	3.3	3.3
Flow Rate (gal/min) 3/week	12/3	12/11	12/17	12/23	12/30
	3.3	3.3	4.3	3.3	3.3
Flow Rate (gal/min) 3/week	12/4	12/12	12/19	12/26	
	4.3	4.3	3.3	3.3	

\*  
WRONG!

Distribution: San Francisco Bay California Regional Water Quality Control Board (quarterly), Lehigh Permanente Cement and Environmental Affairs (monthly).

\* Lab sheets attached for off-site analysis.

\* The values reported here are NOT Median. These are Aves.  
Medians = <2 ; <2 ; <2 ; 4 ; 2 AND: No Violations.



-BDA 6/17/09