

California Regional Water Quality Control Board, San Diego Region

October 29, 2012

Julie Hampel
 Environmental Affairs Division Manager
 University of California, San Diego
 Department of Environmental Health and Safety
 9500 Gilman Drive
 La Jolla, CA 92093

In reply refer to:
Place ID: 256035: MMata

**Subject: Violation of Order No. R9-2005-0008 and Review of Self-Monitoring Reports
 Scripps Institution of Oceanography**

Ms. Hampel:

MONITORING REPORTS REVIEWED FOR ORDER NO R9-2005-0008			
FREQUENCY	PERIOD	REPORT DATE	DATE RECEIVED
Quarterly:	April – June 2012	August 1, 2012	August 1, 2012
	January – March 2012	June 1, 2012	June 1, 2012
	October – December 2011	March 1, 2012	March 1, 2012
	July – September 2011	December 1, 2011	December 1, 2011
	April- June 2011	September 1, 2011	September 1, 2011
	January-March 2011	June 1, 2011	June 1, 2011
	October – December 2010	March 1, 2011	March 1, 2011
	July – September 2010	December 1, 2010	December 1, 2010
	April – June 2010	September 1, 2010	September 1, 2010
	January-March 2010	June 1, 2010	June 1, 2010
	October – December 2009	March 1, 2010	March 1, 2010
July – September 2009	December 1, 2009	December 1, 2009	



MONITORING REPORTS REVIEWED FOR ORDER NO R9-2005-0008			
FREQUENCY	PERIOD	REPORT DATE	DATE RECEIVED
	April – June 2009	September 1, 2009	September 1, 2009
	January - March 2009	May 22, 2009	May 22, 2009
	October – December 2008	February 25, 2009	February 25, 2009
	July – September 2008	November 19, 2008	November 19, 2008
	April – June 2008	August 29, 2008	August 29, 2008
	January – March 2008	May 29, 2008	May 29, 2008
	October – December 2007	February 29, 2008	February 29, 2008
	July – September 2007	November 30, 2007	November 30, 2007
	April – June 2007	August 31, 2007	August 31, 2007
	January – March 2007	June 1, 2007	June 1, 2007
Semiannual	January – June 2012	August 31, 2012	August 31, 2012
	July-December 2011	March 1, 2012	March 1, 2012
	January-June 2011	September 1, 2011	September 1, 2011
	July-December 2010	March 1, 2011	March 1, 2011
	January-June 2010	September 1, 2010	September 1, 2010
	July-December 2009	March 1, 2010	March 1, 2010
	January-June 2009	September 1, 2010	September 1, 2010
	July – December 2008	February 25, 2009	February 25, 2009
	January - June 2008	August 29, 2008	August 29, 2008
	July – December 2007	February 29, 2008	February 29, 2008
	January - June 2007	August 31, 2007	August 31, 2007

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) has completed review of the referenced reports for the subject facility. Please note the following comments and violations on the reports received:

January 2007 - June 2012 Quarterly Reports:

1. No comments at this time.

January – June 2012 Semiannual Report:

◦ **Effluent Violation**

2. The effluent at Outfall No. 1 exceeded the daily maximum limitation of 3 TUc for chronic toxicity (for purple urchin fertilization) with a value of 4 TUc on April 11, 2012.

January – June 2011 Semiannual Report:

◦ **Effluent Violations**

3. The effluent at Outfall No. 1 exceeded the daily maximum limitation of 3 TUc for chronic toxicity (for purple urchin fertilization) with a value of 4 TUc on February 16, 2011.
4. The effluent at Outfall No. 3 exceeded the daily maximum limitation of 3 TUc for chronic toxicity (for purple urchin fertilization) with a value of 16 TUc February 16, 2011.

◦ **Comments**

5. The effluent at Outfall No. 2 exceeded the daily maximum limitation of 3 TUc for chronic toxicity (for purple urchin fertilization) with a value of >16 TUc and the monthly average limitation of 3.12E-8 µg/l for TCCD equivalents with a value of 1.41E-7 µg/l February 16, 2011. The report notes that storm water treatment controls have been installed to prevent dry-weather flows from reaching the ocean and to remove pollutants in storm water runoff. Four ecology embankment /media filters have been installed along the coastline to divert and treat urban runoff before it discharges into the beach.
6. The report notes that a TIE was initiated on samples from Outfall 001, 002, and 003 and makes the following findings:
 - a. It is possible that the source of toxicity for Outfall No. 001 was an unidentified organic constituent. Toxicity in the sample dissipated rapidly and there was no definitive characterization of the cause of toxicity;
 - b. For Outfall No. 002, the toxicity appears to be the result of an organic constituent;
 - c. For Outfall No. 003, to toxicity is likely due to a cationic trace metal.

7. The report notes that chronic toxicity was observed in giant kelp spore growth in the receiving water however a TIE was not conducted due to the limited response of 15% relative to the control observed in the receiving water sample for the sublethal endpoint.

July-December 2011 and July-December 2010 Semiannual Reports:

8. No comments at this time.

January – June 2010 Semiannual Report:

o **Comment**

9. The effluent at Outfall No. 002 exceeded the daily maximum limitation of 3 TUC for chronic toxicity (for purple urchin fertilization) with a value of 8 TUC and the daily maximum limitation of 85 µg/l for copper with a value of 98.23 µg/l on March 7, 2010. The report notes that a TIE was initiated for Outfall 002. The TIE suggests copper, zinc, and PAHs as the possible cause of toxicity.

January – June 2009 Semiannual Report:

o **Effluent Violations**

10. The effluent at Outfall No. 003 exceeded the daily maximum limitation of 3 TUC for chronic toxicity (for giant kelp germination and purple urchin fertilization) with a value of 4 TUC on February 7, 2009.
11. The effluent at Outfall No. 003 exceeded the monthly average limitation of 0.0704 µg/l for PAHs with a value of 0.2002 µg/l on February 7, 2009.
12. The effluent at Outfall No. 003 exceeded the monthly average limitation of 3.12E-08 µg/l for TCDD equivalents with a value of 1.66E-07 µg/l on February 7, 2009.

o **Comments**

13. The effluent at Outfall No. 002 exceeded the daily maximum limitation of 3 TUC for chronic toxicity (for purple urchin fertilization) with a value of 4 TUC on February 7, 2009.
14. The report notes that effluent from Outfall No.'s 002 and 003 exceeded the daily maximum limitation from total residual chlorine. The exceedance of residual chlorine is believed to be a false positive due to physical interference from turbidity. Chlorine is not used in the seawater system at the facility and no potential sources of residual chlorine in the storm water were observed during the sampling.

15. The report notes that a TIE was initiated for Outfall No.'s 002 and 003. The results of the TIE suggest that zinc was responsible for most of the toxicity observed in Outfall No.'s 002 and 003 with a possible contribution of copper to the toxicity observed in Outfall 003.

July- December 2008 Semiannual Report:

16. No comments at this time

January – June 2008 Semiannual Report:

• **Comments**

Order No. R9-2005-0008 specifies effluent limitations shall become effective on February 9, 2008. The following samples were obtained prior to the effective date of the permit limitations and therefore are not considered violations.

17. The effluent at Outfall No. 001 exceeded the daily maximum limitation of 32 µg/l on January 5, 2008 for copper with a value of 35.01 µg/l.
18. The effluent at Outfall No. 001 exceeded the 6-month median limitation of 6 µg/l on January 5, 2008 for lead with a value of 10.53 µg/l.
19. The effluent at Outfall No. 001 exceeded the 6-month median limitation of 44 µg/l on January 5, 2008 for zinc with a value of 67.82 µg/l.
20. The effluent at Outfall No. 001 exceeded the 6-month median limitation of 6 µg/l on January 5, 2008 for total residual chlorine with a value of 12 µg/l.
21. The effluent at Outfall No. 001 exceeded the 30-day average limitation of 0.0264 µg/l on January 5, 2008 for PAHs with a value of 0.052 µg/l.
22. The effluent at Outfall No. 001 exceeded the 30-day average limitation of 1.17E-08 µg/l on January 5, 2008 for TCDD Equivalents with a value of 1.89E-07 µg/l.
23. The effluent at Outfall No. 002 exceeded the daily maximum limitation of 32 µg/l on January 5, 2008 for copper with a value of 36.1 µg/l.
24. The effluent at Outfall No. 002 exceeded the daily maximum limitation of 24 µg/l on January 5, 2008 for total residual chlorine with a value of 46 µg/l.
25. The effluent at Outfall No. 002 exceeded the 30-day average limitation of 0.00051 µg/l on January 5, 2008 for DDT with a value of 0.00071 µg/l.

26. The effluent at Outfall No. 002 exceeded the 30-day average limitation of 1.17E-08 µg/l on January 5, 2008 for TCDD Equivalents with a value of 2.37E-07 µg/l.
27. The effluent at Outfall No. 003 exceeded the daily maximum limitation of 32 µg/l on January 5, 2008 for copper with a value of 41.6 µg/l.
28. The effluent at Outfall No. 003 exceeded the daily maximum limitation of 24 µg/l on January 5, 2008 for total residual chlorine with a value of 123 µg/l.

July – December 2007 Semiannual Report:

- **Comments**

Order No. R9-2005-0008 specifies effluent limitations shall become effective on February 9, 2008. The following samples were obtained prior to the effective date of the permit limitations and therefore are not considered violations.

29. The effluent at Outfall No. 001 exceeded the daily maximum limitations of 32 µg/l on November 30, 2007 for copper with a value of 43 µg/l.
30. The effluent at Outfall No. 001 exceeded the 6-month median limitation of 6 µg/l on November 30, 2007 for lead with a value of 8.64 µg/l.
31. The effluent at Outfall No. 001 exceeded the 6-month median limitation of 44 µg/l on November 30, 2007 for zinc with a value of 107 µg/l.
32. The effluent at Outfall No. 1 exceeded the daily maximum limitation of 3 TUc for chronic toxicity (for giant kelp growth and purple urchin fertilization) with values of 16 TUc and 4 TUc on November 30, 2007.
33. The effluent at Outfall No. 001 exceeded the 30-day average limitation of 0.0264 µg/l on November 30, 2007 for PAHs with a value of 0.127 µg/l.
34. The effluent at Outfall No. 001 exceeded the 30-day average limitation of 1.17E-08 µg/l on November 30, 2007 for TCDD Equivalents with a value of 5.52E-07 µg/l.
35. The effluent at Outfall No. 002 exceeded the instantaneous maximum and daily maximum limitations of 86 µg/l and 32 µg/l respectively, on November 30, 2007 for copper with a value of 123 µg/l.
36. The effluent at Outfall No. 002 exceeded the daily maximum limitation of 24 µg/l on November 30, 2011 for total residual chlorine with a value of 26 µg/l.
37. The effluent at Outfall No. 002 exceeded the daily maximum limitation of 3 TUc for chronic toxicity (for giant kelp germination) with a value of 4 TUc on November 30, 2007.

38. The effluent at Outfall No. 002 exceeded the 30-day average limitation of 0.00051 µg/l on November 30, 2007 for DDT with a value of 0.00166 µg/l.
39. The effluent at Outfall No. 002 exceeded the 30-day average limitation of 1.17E-08 µg/l on November 30, 2007 for TCDD Equivalents with a value of 7.56E-08 µg/l.
40. The effluent at Outfall No. 003 exceeded the instantaneous maximum and daily maximum limitations of 86 µg/l and 32 µg/l respectively, on November 30, 2007 for copper with a value of 115 µg/l.
41. The effluent at Outfall No. 003 exceeded the daily maximum limitation of 224 µg/l on November 30, 2007 for zinc with a value of 253 µg/l.
42. The effluent at Outfall No. 003 exceeded the daily maximum limitation of 3 TUc for chronic toxicity (for purple urchin fertilization) with a value of 8 TUc on November 30, 2007.
43. The effluent at Outfall No. 003 exceeded the 30-day average limitation of 1.17E-08 µg/l on November 30, 2007 for TCDD Equivalents with a value of 3.61E-08 µg/l.

January – June 2007 Semiannual Report:

- **Comments**

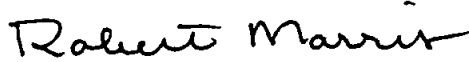
Order No. R9-2005-0008 specifies effluent limitations shall become effective on February 9, 2008. The following samples were obtained prior to the effective date of the permit limitations and therefore are not considered violations.

44. The effluent at Outfall No. 003 exceeded the 6-month median limitation of 5 µg/l on May 14, 2007 for copper with a value of 18.92 µg/l.
45. The effluent at Outfall No. 003 exceeded the 6-month median limitation of 6 µg/l on May 14, 2007 for total residual chlorine with a value of 10 µg/l.
46. The effluent at Outfall No. 004b exceeded the 30-day average limitation of 60 mg/l on May 14, 2007 for total suspended solids with a value of 116 mg/l.
47. The effluent at Outfall No. 004b exceeded the 6-month median limitation of 6 µg/l on May 14, 2007 for total residual chlorine with a value of 9 µg/l.

Pursuant to the California Water Code (CWC) section 13385(h), violation no.'s 11 and 12 noted above are subject to a mandatory minimum penalty of \$3,000 for each violation. The San Diego Water Board will issue that enforcement action under separate cover.

In the subject line of any response, please include the information located in the heading of this letter: "In reply refer to." For questions or comments, please contact Michelle Mata by phone at 858-467-2981, or by email mmata@waterboards.ca.gov.

Respectfully,



Robert W. Morris
Senior Water Resource Control Engineer

RWM:mm

Tech Staff Info & Use	
Order No.	R9-2005-0008
Party (GT/CIWQS) ID	285299
WDID	9 000000018
NPDES No.	CA0107239
Reg. Measure ID	133290
Place ID	256035
Person ID	345969

V: (2) 935663, (3) 926001, (4) 926002, (10) 938517, (11) 938519, (12) 938523

SEL: 385286