

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

597th Regular Board Meeting
Thursday, June 9, 2016

ITEM NO. 10

ORDER NO. R4-2016-XXXX
NPDES NO. CA0059188

WASTE DISCHARGE REQUIREMENTS
FOR THE
CALIFORNIA DEPARTMENT OF WATER RESOURCES
(WILLIAM E. WARNE POWER PLANT)

CHANGE SHEET

(Additions are underlined, deletions are lined over)

1. Removal of effluent limitations for bis (2-ethylhexyl) phthalate

Agenda pages 10-064 and 10-066 (Order, Pages 5 and 7):

A. Effluent limitations – Discharge Point 001 (A&B)

Table 4. Effluent Limitations for Discharge Point 001(A&B)

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Priority Pollutants					
Bis(2-ethylhexyl) Phthalate	µg/L	1.8	3.6	--	--
	lbs/day ⁴	0.029	0.059	--	--

B. Effluent limitations – Discharge Point 002

Table 5. Effluent Limitations for Discharge Point 002

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Priority Pollutants					
Bis(2-ethylhexyl) Phthalate	µg/L	1.8	3.6	--	--
	lbs/day ¹	0.00030	0.00060	--	--

Agenda pages 10-037 and 10-039 (Attachment F (Fact Sheet), Pages F-22 and F-24):

IV.C.3 (Determining the Need for WQBELs)

RPAs were performed for Discharge Points 001(A&B) and 002 using data collected by the Discharger from July 2010 through December 2015. Based on the RPA for Discharge Point 001 (A&B), copper, and mercury, and bis(2-ethylhexyl)phthalate

demonstrated reasonable potential to exceed applicable water quality criteria. Based on the RPA for Discharge Point 002, copper, lead, mercury, zinc, ~~bis(2-ethylhexyl)phthalate~~, bromoform, chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene demonstrated reasonable potential to exceed applicable water quality criteria.

Table F-10. Summary of Reasonable Potential Analysis – Discharge Point 001(A&B)

CTR No.	Constituent	Applicable Water Quality Criteria (µg/L)	Maximum Effluent Concentration (µg/L)	Maximum Detected Receiving Water Concentration (µg/L)	RPA Result – Need Limitation?	Reason
68	Bis(2-Ethylhexyl)-Phthalate	1.8	5.9 ²	<2.3	Yes <u>No</u>	MEC ≥ C MEC < C B < C

Footnotes

- ². The Facility does not have potential sources for this pollutant. This is the only detected result in the past six years and it may be caused by sample contamination. It was excluded from the data set used for the evaluation of reasonable potential. However, monthly monitoring for this pollutant is required in the permit.

Table F-11. Summary of Reasonable Potential Analysis – Discharge Point 002

CTR No.	Constituent	Applicable Water Quality Criteria (µg/L)	Maximum Effluent Concentration (µg/L)	Maximum Detected Receiving Water Concentration (µg/L)	RPA Result – Need Limitation?	Reason
68	Bis(2-Ethylhexyl)-Phthalate	1.8	79 ²	<2.3	Yes <u>No</u>	MEC ≥ C MEC < C B < C

Footnotes

- ². The Facility does not have potential sources for this pollutant. This is the only detected result in the past six years and it may be caused by sample contamination. It was excluded from the data set used for the evaluation of reasonable potential. However, monthly monitoring for this pollutant is required in the permit.

IV.C.4 (WQBEL Calculations)

- b. Based on the RPA for Discharge Point 001 (A&B), copper, and mercury, ~~and bis(2-ethylhexyl)phthalate~~ demonstrated reasonable potential to cause or contribute to an exceedance of water quality objectives. The RPA for Discharge Point 002 identified reasonable potential for copper, lead, mercury, zinc, ~~bis(2-ethylhexyl)phthalate~~, bromoform, chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene.

Agenda page 10-048 (Fact Sheet, Page F-33):

IV.D (Final Effluent Limitation Considerations)

This Order includes effluent limitations at Discharge Point 001 (A&B) for copper, and mercury, and bis (2-ethylhexyl)phthalate, based on the reasonable potential analysis. This Order includes effluent limitations at Discharge Point 002 for copper, lead, zinc, bis(2-ethylhexyl)phthalate, bromoform, chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene based on the reasonable potential analysis.

Agenda pages 10-051 and 10-052 (Fact Sheet, Pages F-36 and F-37):

IV.D.4 (Summary of Final Effluent Limitations)

Table F-14. Summary of Final Effluent Limitations – Discharge Point 001(A&B)

Parameter	Units	Effluent Limitations			Basis for Limitation ¹
		Average Monthly	Maximum Daily	Instantaneous Minimum/Maximum	
Priority Pollutants					
Bis(2-ethylhexyl) Phthalate	µg/L	1.8	3.6	--	SIP/CTR
	lbs/day ²	0.029	0.059	--	

Table F-15. Summary of Final Effluent Limitations – Discharge Point 002

Parameter	Units	Effluent Limitations			Basis for Limitation ¹
		Average Monthly	Maximum Daily	Instantaneous Minimum/Maximum	
Priority Pollutants					
Bis(2-ethylhexyl) Phthalate	µg/L	1.8	3.6	--	SIP/CTR
	lbs/day ²	0.00030	0.00060	--	

2. Additions of Intake Water Credits for Nitrate plus Nitrite and *E. coli*

Agenda pages 10-063 and 10-065 (Order, Pages 4 and 6):

A. Effluent limitations – Discharge Point 001 (A&B)

Table 4. Effluent Limitations for Discharge Point 001(A&B)

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Non-Conventional Pollutants					
E. coli ⁸	MPN/100 ml	126 ⁶ / 235 ⁷			
Nitrate Plus Nitrite (as N) ⁸	mg/L	6.8	--	--	--
	lbs/day ¹	111	--	--	--

Footnotes

8.

When determining compliance with the chloride effluent limitation, the intake water credit is the 3-month rolling average chloride concentration in the influent.

When determining compliance with *E. coli* effluent limitations, intake water credits are a single maximum value of the influent and a geometric mean of the five influent results within a quarter, respectively.

When grab samples are taken, the timing and location of intake water and effluent samples shall reflect the travel time of water in the Facility. The intake water sample shall directly correspond to the effluent sample.

B. Effluent limitations – Discharge Point 002

Table 5. Effluent Limitations for Discharge Point 002

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Non-Conventional Pollutants					
E. coli ⁸	MPN/100 ml	126 ⁶ / 235 ⁷			
Nitrate Plus Nitrite (as N) ⁸	mg/L	6.8	--	--	--
	lbs/day ¹	1.1	--	--	--

Footnotes

8.

When determining compliance with the chloride effluent limitation, the intake water credit is the 3-month rolling average chloride concentration in the influent.

When determining compliance with *E. coli* effluent limitations, intake water credits are a single maximum value of the influent and a geometric mean of the five influent results within a quarter, respectively.

When grab samples are taken, the timing and location of intake water and effluent samples shall reflect the travel time of water in the Facility. The intake water sample shall directly correspond to the effluent sample.

Agenda pages 10-043 (Fact Sheet, Page F-28):

IV.C.4.d (Effluent Limitations Based on Intake Water Credits)

Effluent limitations based on intake water credits prohibit the Facility from contributing additional amounts of the constituents to the discharge beyond the original effluent limitations or the concentration of the pollutant in the intake water. As a result, this Order includes intake water credits as specified in sections IV.A and B of this Order for mercury and turbidity at Discharge Points 001(A&B) and 002. During the comment period, the Discharger indicated that chloride data reported during the past five years at a point in the State Water Project conveyance approximately 15 miles upstream of the Facility exceeded the chloride effluent limitation of 100 mg/L in several instances. The variability in the chloride concentration in the intake water (State Water Project water) was referenced in the Upper Santa Clara River TMDL Reconsideration Final Staff Report (August 2006). The Discharger also indicated that there are no potential sources for nitrate plus nitrite and *E. coli* from the operations at the Facility. The intake water is the only source for these pollutants. After reviewing the information submitted by the Discharger, Regional Board determined that the criteria for applying intake water credit for chloride, nitrate plus nitrite, and *E. coli* as specified in 40 C.F.R. section

122.45(g) has been satisfied. Therefore, this Order includes intake water credit for chloride, nitrate plus and *E. coli*.

Agenda pages 10-050 through 10-052 (Fact Sheet, Pages F-35 through F-37):

IV.D.4 (Summary of Final Effluent Limitations)

Table F-14. Summary of Final Effluent Limitations – Discharge Point 001(A&B)

Parameter	Units	Effluent Limitations			Basis for Limitation ¹
		Average Monthly	Maximum Daily	Instantaneous Minimum/Maximum	
Non-Conventional Pollutants					
<i>E. coli</i> ⁹	MPN/100 ml	126 ⁷ / 235 ⁸			TMDL
Nitrate Plus Nitrite (as N) ⁹	mg/L	6.8	--	--	TMDL
	lbs/day ²	110	--	--	

Footnotes

9.

When determining compliance with the chloride effluent limitation, the intake water credit is the 3-month rolling average chloride concentration in the influent.

When determining compliance with *E. coli* effluent limitations, intake water credits are a single maximum value of the influent and a geometric mean of the five influent results within a quarter, respectively.

When grab samples are taken, the timing and location of intake water and effluent samples shall reflect the travel time of water in the Facility. The intake water sample shall directly correspond to the effluent sample.

Table F-15. Summary of Final Effluent Limitations – Discharge Point 002

Parameter	Units	Effluent Limitations			Basis for Limitation ¹
		Average Monthly	Maximum Daily	Instantaneous Minimum/Maximum	
Non-Conventional Pollutants					
<i>E. coli</i> ⁹	MPN/100 ml	126 ⁷ / 235 ⁸			TMDL
Nitrate Plus Nitrite (as N) ⁹	mg/L	6.8	--	--	TMDL
	lbs/day ²	110	--	--	

Footnotes

9.

When determining compliance with the chloride effluent limitation, the intake water credit is the 3-month rolling average chloride concentration in the influent.

When determining compliance with *E. coli* effluent limitations, intake water credits are a single maximum value of the influent and a geometric mean of the five influent results within a quarter, respectively.

When grab samples are taken, the timing and location of intake water and effluent samples shall reflect the travel time of water in the Facility. The intake water sample shall directly correspond to the effluent sample.

3. Addition of Influent Monitoring Requirements for Nitrate plus Nitrite and *E. coli*

Agenda pages 10-131 (Attachment E, Monitoring and Reporting Program, Page E-5):

III.A (Monitoring Location INF-001)

Table E-2. Influent Monitoring at EFF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Turbidity ¹	NTU	Grab	1/Month	²
Mercury, Total Recoverable ¹	µg/L	Grab	1/Month	²
Chloride	mg/L	Grab	1/Monthly	²
<u>Nitrate plus nitrite (as N)</u>	<u>mg/L</u>	<u>Grab</u>	<u>1/Quarter</u>	²
<u>E. coli</u>	<u>MPN/100ml</u>	<u>Grab</u>	<u>5/Quarter</u> ⁵	²
TCDD Equivalents ³	µg/L	Grab	2/Year	²
Asbestos	fibers/L	Grab	2/Year	EPA method 100.2
Other Priority Pollutants ⁴	µg/L	Grab	1/Year	²

Footnotes

5. Generally not less than five (5) samples should be taken equally spaced over a 30-day period with the first sample taken in the monitoring month (February, May, August, or November) for the required quarter. The results will provide sufficient data for the calculation of the geometric mean values.