

State of California  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION

ORDER NO. R4-2004-0073  
AMENDING ORDER NO. R4-2002-0093  
NPDES PERMIT NO. CA0060267

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT  
AND  
WASTE DISCHARGE REQUIREMENTS  
FOR  
HARRIS WATER CONDITIONING, INC.

The California Regional Water Quality Board, Los Angeles Region (hereinafter Regional Board), finds:

1. The Regional Board previously adopted Order R4-2002-0093 which serves as the National Pollutant Discharge Elimination System (NPDES) permit (CA0060267) establishing waste discharge requirements for Harris Water Conditioning (hereinafter Harris or Discharger), dba Culligan Water Conditioning. Requirements, including effluent limitations, interim effluent limitations, and compliance schedules were developed based upon information available to the Regional Board on April 25, 2002. Accompanying the Order was a monitoring and reporting program that required higher sampling frequencies than had previously been required for a number of constituents.
2. Order R4-2002-0093 regulates the discharge of up to 110,000 gallons per day of non-industrial water softener regeneration backwash water and final rinse water via Arundell Barranca to the Ventura Marina, a water of the United States. The point of discharge is located at Latitude 34<sup>o</sup>, 15', 43" North and Longitude 119<sup>o</sup>, 14', 32" West.
3. Consistent with applicable law (including the State Implementation Policy for the California Toxics Rule), the Regional Board adopted interim effluent limitations and schedules of compliance based on past facility performance. The interim limits were derived from a statistical analysis of what the facility had previously discharged with its existing treatment technologies, and were designed to provide interim effluent limitations until more advanced treatment technologies could be designed, tested, and installed. Interim effluent limitations are not set at a level that guarantees compliance. In reviewing a data set, the Regional Board does not set the interim effluent limitation at the highest detection level. Instead, the State Board has upheld the Regional Board' s practice of using an appropriate confidence level as provided in U.S. EPA' s Technical Support Document. (See State Board Order No. WQO 2003-0012, pp. 14-15.)
4. On May 28, 2002, the Discharger filed a protective petition with the State Water Resources Control Board (State Board) challenging certain provisions of the Order. The Discharger requested that the State Board hold the petition in abeyance (i.e., not process the petition), while it continued efforts to comply with the Order.

5. During the intervening two years, the Discharger has conducted the enhanced monitoring as required pursuant to the monitoring and reporting program accompanying the Order. The new data demonstrate that, had the Discharger been required to perform more frequent sampling under its prior permit, the facility would not have been capable of achieving the interim effluent limitations specified in the Order. Put another way, had the more complete data set been available to the Regional Board in 2002, the statistical derivation of the interim effluent limitations using the Regional Board's statistical methods would have supported higher interim effluent limitations.
6. Following is the new information provided by the Discharger:
  - a. Harris has undertaken an investigation of the discharge and the constituent concentrations contained therein during peak operating hours. This investigation has provided new information regarding the characteristics of the discharge and the contaminant concentrations present in the discharge.
  - b. The discharge has concentrations of copper and zinc that exceed the interim requirements stipulated in Order R4-2002-0093.
  - c. Harris has investigated several treatment technologies designed to reduce contaminant concentrations in order to meet the final limits specified in the Order.
  - d. Harris has identified a potential treatment technology (selective ion exchange) that will reduce these constituent concentrations in order to meet the final effluent limits and is currently conducting a pilot test.
  - e. Concentrations of total suspended solids (TSS) in the discharge have exceeded the limits in Order R4-2002-0093. The Discharger has investigated potential sources and is evaluating methods of reducing this constituent.
  - f. The Discharger determined that the long-term flow rate approximates the permitted maximum flow rate. Consequently, the mass limits for the monthly average concentrations have been recalculated using 0.110 million gallons per day flow rate.
7. Based on the data generated by these investigation, the Discharger made a verbal request in October, 2003 for new interim contaminant concentration limits for zinc, copper and TSS. In addition, the discharger requested to extend the time period for operation under the interim limits. On February 27, 2004, the Discharger submitted a written request that also included consideration of interim requirements for BOD<sub>5</sub>20°C and an adjusted long-term flow rate of 110,000 gallons per day.
8. The Regional Board has determined that applying its statistical methods to the more complete data set would justify higher interim effluent limitations, and that because interim effluent limitations are specifically designed to provide a mechanism for dischargers to come into compliance with final water quality-based effluent limitations, it would be appropriate to apply these interim limits to this Discharger.

9. The relaxation of effluent limitations, including interim effluent limitations, is generally prohibited by anti-backsliding provisions of the Clean Water Act. (33 U.S.C. § 1342(o).) However, the adjustment and relaxation of water quality-based effluent limitations based on new information is excepted from the general prohibition. (33 U.S.C. § 1342(o)(2)(B)(i); see also State Board Order No. WQO 2003-0012, p. 16.) In this case, the enhanced data set providing information about the treatment capabilities of the facility is "new information . . . which was not available at the time of permit issuance . . . which would have justified the imposition of less stringent effluent limitation at the time of permit issuance." (See 33 U.S.C. § 1342(o)(2)(B)(i).)
10. Because the Regional Board has concluded that the enhanced monitoring data would have supported different interim effluent limitations for certain constituents at the time of permit issuance and because a petition is pending before the State Board, the Regional Board has decided to act and to modify the Order. Unless otherwise specified, in acting on a petition for review any revisions the State Board makes relate back to the date of permit adoption. Similarly, the Regional Board intends the modified interim effluent limitations to relate back to the original Order adoption date. Such an approach is consistent with the language of Clean Water Act section 402(o)(2)(B)(i).
11. The following revision incorporates the request for an extension of the compliance schedule during which the interim concentration limits will be effective and adjusts the interim concentration limits for copper and zinc. The monthly mass effluent limits have also been recalculated utilizing the 110,000 gallons per day maximum flow rate as requested. Regional Board staff has worked closely with the Discharger and assessed progress toward final treatment technologies. A revision to the compliance schedules' duration is necessary to implement the final treatment technology and the extended time is as short as possible. A Time Schedule Order has been developed to provide interim limits for TSS. The request for interim requirements for BOD<sub>5</sub>20°C was denied since the Discharger has demonstrated the ability to meet the effluent limitations prescribed in Order No. R4-2002-0093.
12. This revision does not modify any of the Discharger' s final water quality-based effluent limitations.

### **CEQA and Notifications**

13. The Regional Board has notified the Discharger and interested agencies and persons of its intent to issue waste discharge requirements for this discharge, and has provided them with an opportunity to submit their written views and recommendations.
14. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.
15. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Clean Water Act or amendments thereto, and shall take effect at the end of ten days from the date of its adoption provided the Regional Administrator, USEPA, has no objections.

16. Pursuant to California Water Code section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, Office of Chief Counsel, ATTN: Elizabeth Miller Jennings, Senior Staff Counsel, 1001 I Street, 22<sup>nd</sup> Floor, Sacramento, California, 95814, within 30 days of adoption of this Order.
17. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) in accordance with the California Water Code, section 13389.

**IT IS HEREBY ORDERED** that Order No. R4-2002-0093, adopted by the Board on April 25, 2002, is hereby amended as follows:

1. Change item **I. Discharge Requirements**, B.2., Page 7, to read as follows:
  2. A temperature greater than 86° F.
2. Change item **I. Discharge Requirements**, B.4., Page 10, Final effluent limitations, to read as follows:
  4. Final effluent limitations: The discharge of an effluent with constituents in excess of the following limitations is prohibited:

Constituents	Discharge Limitations			
	Daily Maximum		Monthly Average	
	Concentration	Mass <sup>1</sup> (lbs/day)	Concentration	Mass <sup>1</sup> (lbs/day)
Oil and Grease	15 (mg/L)	13.8	10 (mg/L)	9.2
BOD <sub>5</sub>	30 (mg/L)	27.5	20 (mg/L)	18.4
Total Suspended Solids <sup>4</sup>	150 (mg/L)	138	50 (mg/L)	46
Arsenic <sup>2</sup>	80 (µg/L)	0.07	---	---
Cadmium <sup>2,3</sup>	4 (µg/L)	0.004	2 (µg/L)	0.002
Chromium (total) <sup>2</sup>	20 (µg/L)	0.02	---	---
Copper <sup>2,3</sup>	14 (µg/L)	0.01	7 (µg/L)	0.006
Lead <sup>2,3</sup>	5 (µg/L)	0.005	3 (µg/L)	0.003
Mercury <sup>2,3</sup>	0.1 (µg/L)	0.00009	0.05 (µg/L)	0.00005
Nickel <sup>2,3</sup>	86 (µg/L)	0.08	43 (µg/L)	0.04
Silver <sup>2,3</sup>	4 (µg/L)	0.004	2 (µg/L)	0.002
Zinc <sup>2,3</sup>	120 (µg/L)	0.1	61 (µg/L)	0.06

<sup>1</sup>The mass-based effluent limitations for the daily maximum and monthly average are based on the maximum permitted flow of 0.110 million gallons per day (mgd).

The equation used to calculate the mass is :

$m = 8.34 * C * Q$  where:

m = mass limit for a pollutant in lbs/day

C = concentration limit for a pollutant, mg/L

Q = daily maximum discharge flow rate for daily maximum and long term average of for the monthly average

<sup>2</sup> Discharge limitations for these metals are expressed as total recoverable.

<sup>3</sup> Limitations for these parameters are not effective until May 30, 2005 after the effective date of this Order.

<sup>4</sup> A Time Schedule Order has been developed which includes interim requirements for total suspended solids.

3. Change item I. **Discharge Requirements**, B.5., Page 10, Interim effluent limitations, to read as follows:

5. Interim Effluent Limitations. From the effective date of Order No. R4-2002-0093 through May 30, 2005, the discharge of an effluent with constituents in excess of the following limitations is prohibited:

Constituents	Discharge Limitations			
	Daily Maximum		Monthly Average	
	Concentration (µg/L)	Mass <sup>1</sup> (lbs/day)	Concentration (µg/L)	Mass <sup>1</sup> (lbs/day)
Copper <sup>2</sup>	572	0.53	---	---
Lead <sup>2</sup>	80	0.07	---	---
Mercury <sup>2</sup>	0.5	0.0005	0.5	0.0005
Nickel <sup>2</sup>	86 <sup>3</sup>	0.08	80	0.07
Silver <sup>2</sup>	4.5	0.004	---	---
Zinc <sup>2</sup>	510	0.47	---	---

<sup>1</sup> The mass-based effluent limitations are based on the maximum permitted discharge of 0.110 mgd.

The equation used to calculate the mass is :

$m = 8.34 * C * Q$  where:

m = mass limit for a pollutant in lbs/day

C = concentration limit for a pollutant, mg/L

Q = daily maximum discharge flow rate for daily maximum and long term average of for the monthly average

<sup>2</sup> Discharge limitations for these metals are expressed as total recoverable.

<sup>3</sup> This is the final effluent limit. No interim limit was required for the daily maximum for nickel.

4. Change item II. **REQUIREMENTS**, B. Compliance Plan, Item 4 and 5, Page 13 to read:

4. The interim limits stipulated shall be in effect for a period not to extend beyond May 30, 2005. Thereafter, the Discharger shall comply with the limitations specified in Section I.B.4. of this Order.

5. The Discharger must notify the Regional Board's Executive Officer, in writing, no later than 14 days following each interim date, compliance implementation event, or quarterly report, of the Discharger's compliance or noncompliance with the interim requirements.

5. The Expiration Date and all other Limitations, Requirements and Provisions of Order No. R4-2002-0093 are unchanged and shall remain in full force and effect.

Harris Water Conditioning, Inc.  
Order No. R4-2004-0073

CA0060267

I, Dennis Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on May 6, 2004.

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Dennis A. Dickerson  
Executive Officer