## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

Cease And Desist Order No. R7-2010-0037
Issued To
Valley Sanitary District, Owner/Operator
Municipal Wastewater Treatment Plant,
Collection And Disposal Systems
Indio — Riverside County

The California Regional Water Quality Control Board, Colorado River Basin Region (hereinafter referred to as the Regional Board), finds that:

- 1. Valley Sanitary District, 45500 Van Buren Street, Indio, CA 92201 (hereinafter, Discharger) owns and operates a municipal wastewater treatment plant (WWTP) that provides sewerage services to the City of Indio in Riverside County. The current total design capacity of the wastewater treatment plant is 11 MGD. The WWTP consists of three separate treatment trains: 1) an activated sludge treatment system, 2) a wetlands system, and 3) an oxidation pond system. Influent enters the main influent pumping station and is pumped to the screening facility. From the screening facility it flows through the aerated grit chamber and is then apportioned between the activated sludge plant primary clarifiers and the wetlands pumping station. The Discharger plans to complete the second phase of the plant expansion, which would increase the activated sludge treatment plant capacity to 10.0 MGD, which would increase the overall total design capacity of the wastewater treatment plant to 13.5 MGD. The expansion is expected to be constructed by the end of 2013.
- 2. The WWTP is a publicly owned treatment works (POTW) that discharges its effluent into the Coachella Valley Storm Water Channel (Channel), which is a tributary to the Salton Sea. The Channel and the Salton Sea are waters of the United States.
- 3. The Regional Board adopted a Water Quality Control Plan for the Colorado River Basin (Basin Plan) on November 17, 1993 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. The following are designated beneficial uses of the Channel:
  - a. Fresh Water Replenishment of Salton Sea (FRSH)
  - b. Water Contact Recreation (REC I)<sup>1</sup>
  - c. Non-Contact Water Recreation (REC II)<sup>1</sup>
  - d. Warm Freshwater Habitat (WARM)
  - e. Wildlife Habitat (WILD)
  - f. Preservation of Rare, Threatened, or Endangered Species (RARE)<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Unauthorized use.

<sup>&</sup>lt;sup>2</sup> Rare, endangered, or threatened wildlife exists in or utilizes some of these waterway(s). If the RARE beneficial use may be affected by a water quality control decision, responsibility for substantiation of the existence of rare, endangered, or threatened species on a case-by-case basis is upon the California Department of Fish and Game on its own initiative and/or at the request of the Regional

- 4. Clean Water Act Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established as described in proposed Waste Discharge Requirements (WDRs) Order No. R7-2010-0019.
- 5. On March 2, 2000, the State Water Resources Control Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP and its amendments establish implementation provisions including 1) priority pollutant criteria and objectives, and 2) provisions for chronic toxicity control.
- 6. On June 29, 2005, the Regional Board adopted WDRs Order No. R7-2005-0081 (NPDES Permit No. CA0104477)<sup>3</sup> for the Discharger to regulate discharges of treated wastewater, which rescinded WDRs Order No. R7-2000-0010. WDRs Order No. R7-2005-0081 specifies effluent limitations, prohibitions, specifications, and provisions necessary to protect the beneficial uses of the surface and ground waters within the Colorado River Basin Region. WDRs Order No. R7-2005-0081 became effective on June 29, 2005 and will expire on June 29, 2010.
- 7. WDRs Order No. R7-2005-0081 states in VI. Special Provision C.1.a. (page 12):

The Discharger shall submit data sufficient to determine if a water quality-based effluent limitation is required in the discharge permit as required under the State Implementation Policy (SIP). It is the Discharger's responsibility to provide all information requested by the Regional Water Board for use in the analysis. The permit shall be reopened to establish water quality-based effluent limitations, if necessary.

- 8. On June 17, 2010, the Regional Board is scheduled to consider adopting proposed WDRs Order No. R7-2010-0019 (NPDES Permit No. CA0104477) and rescinding WDRs Order No. R7-2005-0081. WDRs Order No. R7-2010-0019 specifies effluent limitations, prohibitions, specifications, and provisions necessary to protect the beneficial uses of the surface and ground waters within the Colorado River Basin Region. If adopted, WDRs Order No. R7-2010-0019 will become effective on June 17, 2010 and will expire on June 16, 2015.
- 9. The Regional Board received a letter dated May 6, 2010 from the Discharger. (Attachment A.) The letter states in part that the Discharger conducted additional testing for eight weeks to determine whether they could meet the newly established effluent limitations for copper and heptachlor. The sampling results indicate copper concentrations ranging from not detected to 11 ppb, and heptachlor was detected one time at 0.02 ppb. Therefore, the Discharger is requesting the Regional Board to adopt a

Board; and such substantiation must be provided within a reasonable time frame as approved by the Regional Board.

http://www.waterboards.ca.gov/coloradoriver/board\_decisions/adopted\_orders/orders/2005/05\_0081wdr.pdf.

- Cease and Desist Order for copper and heptachlor effluent limitations concurrent with adopting the new WDRs Order.
- 10. Monitoring and Reporting Program R7-2005-0081 (Attachment E in the WDR Order) IV. Effluent Monitoring Requirements C.1. (page E-3) requires the Discharger to monitor for priority pollutants on an annual basis. The data collected has been used to conduct a reasonable potential analysis as required by the California Toxics Rule (CTR) and the SIP. The results of the Discharger's 2009 annual Self-Monitoring Report for priority pollutants and subsequent monitoring by the Discharger have shown that there is a reasonable potential to exceed water quality criteria/objectives for copper and heptachlor. Based on the Beneficial Use determination of warm freshwater habitat (WARM) in the Basin Plan for the Channel and the criteria/objectives established in the CTR for freshwater aquatic life, the Regional Board has determined that water-quality based effluent limits are required for proposed WDRs Order No. R7-2010-0019.
- 11. IV. Effluent Limitation A.1.d. and e. of proposed WDRs Order No. R7-2010-0019<sup>4</sup> (pages 13-14) establishes final effluent limitations for copper and heptachlor for the existing facility and for when the facility expansion is completed in 2013. The effluent limitations were calculated based on monitoring results and the CTR. The present WDRs Order, No. R7-2005-0081, does not include effluent limitations for copper and heptachlor.

Table 1 Final Effluent Limitations – Combined Discharge (Existing Facility)

		Effluent Limitations				
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper, Total Recoverable	μg/L	7.0		14		
	lbs/day1	0.64		1.3		
Heptachlor	μg/L	0.00021		0.00042		
	lbs/day1	0.000019		0.000039		

<sup>&</sup>lt;sup>1</sup> The mass-based effluent limitations are based on a design capacity of 11.0 MGD.

Table 2 Final Effluent Limitations – Combined Discharge (Expanded Facility)

Parameter		Effluent Limitations				
	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper, Total Recoverable	μg/L	7.0		14		
	lbs/day1	0.79		1.6		
Heptachlor	μg/L	0.00021		0.00042		
	lbs/day1	0.000024		0.000047		

<sup>&</sup>lt;sup>1</sup> The mass-based effluent limitations are based on a design capacity of 13.5 MGD.

12. Based on the information in the Discharger's May 6, 2010 letter and the annual Self Monitoring Report (discussed in Finding 10), the Discharger threatens violation of the final effluent limitation for copper and heptachlor in Board Order No. R7-2010-0019.

<sup>&</sup>lt;sup>4</sup> http://www.waterboards.ca.gov/coloradoriver/board\_decisions/adopted\_orders/orders/2010/0019vly\_sanitary.pdf

13. Section 13301 of the California Water Code (CWC) states in part:

When a regional board finds that a discharge of waste is taking place, or threatening to take place, in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action. In the event of an existing or threatened violation of waste discharge requirements in the operation of a community sewer system, cease and desist orders may restrict or prohibit the volume, type, or concentration of waste that might be added to that system by Dischargers who did not discharge into the system prior to the issuance of the cease and desist order.

- 14. CWC Section 13385(h) and (i) require the Regional Board to impose mandatory minimum penalties upon Dischargers that violate certain effluent limitations. CWC Section 13385(j) exempts certain violations from the mandatory minimum penalties. CWC Section 13385(j)(3) exempts the discharge from mandatory minimum penalties "where the waste discharge is in compliance with either a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300, if all the [specified] requirements are met."
- 15. Pursuant to CWC Section 13385(j)(3)(B)(i), mandatory minimum penalties under 13385 (h) and (i) will not apply to the copper and heptachlor effluent limitations violations in WDRs Order No. R7-2010-0016 where the discharge is in compliance with this CDO. The effluent limitations for copper and heptachlor are new parameters established in proposed WDRs Order R7-2010-0016, which will rescind WDRs Order No. R7-2005-0081. Compliance with this Order exempts the Discharger from mandatory minimum penalties for violations of effluent limitations in accordance with CWC Section 13385(j)(3) from the date of this Order's adoption by the Regional Board.
- 16. CWC Section 13385(j)(3) requires the Discharger to prepare and implement a pollution prevention plan pursuant to CWC Section 13263.3. Therefore, a pollution prevention plan is necessary for copper and heptachlor to effectively reduce the effluent concentrations by source control measures. CWC Section 13263.3(d)(1)(D) provides that the regional board has the authority to require a Discharger to complete and implement a pollution prevention plan if the Discharger is subject to a cease and desist order such as this one.
- 17. Issuance of this Cease and Desist Order to enforce CWC Division 7, Chapter 5.5 is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.), in accordance with Section 15321 ("Enforcement Actions by Regulatory Agencies"), Title 14, California Code of Regulations.

18. Any person aggrieved by this action of the Regional Board may petition the State Water Resources Control Board to review the action in accordance with CWC Section 13320 and CCRs, Title 23, Section 2050 and following. The State Board must receive the petition no later than 5:00 p.m., thirty (30) days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: <a href="http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality.">http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality.</a> Copies will also be provided upon request.

IT IS HEREBY ORDERED, that in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, the Discharger shall comply with the following:

1. The Discharger is required to prepare and implement a Pollution Prevention Plan pursuant to Section 13263.3 of the CWC. The Pollution Prevention Plan must address the items specified in Section 13263.3(d)(3) and shall take specific actions as indicated in the following time schedule to achieve compliance with all requirements of Board Order No. R7-2010-0019 by June 30, 2013. The Discharger must submit the Pollution Prevention Plan no later than September 30, 2010.

Milestone	Milestone Submittal	Completion Date	
1	Submit a Copy of the design and construction plan to the Regional Board	September 30, 2010	
2	Submit a Copy of the Pollution Prevention Plan to the Regional Board	September 30, 2010	
3	Submit a Copy of Final Design Drawings to the Regional Board	June 30, 2011	
4	Submit Summary and Verification of Construction Completion	June 30, 2013	

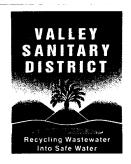
2. Wastewater to Coachella Valley Storm Water Channel shall not exceed the interim effluent limits for copper and heptachlor. The interim effluent limits are based on plant performance data, reference data from representative wastewater treatment facilities, and Best Professional Judgment (BPJ):

Constituent	<u>Unit</u>	Date Interim Effluent Limit Becomes Effective	Maximum Daily Effluent Limit	Average Monthly Effluent Limit
Copper, Total Recoverable	μg/L	June 17, 2010	70	35
	lbs/day	June 17, 2010	6.5	3.2
Heptachlor	μg/L	June 17, 2010	0.04	0.03
	lbs/day	June 17, 2010	0.0037	0.0028

- 3. The Discharger shall submit quarterly reports, due by the 15<sup>th</sup> of January, April, July, and October of each year, on the status of the preparation and implementation of the Pollution Prevention Plan and associated Milestones listed in the Table above.
- 4. Plans and schedules are subject to the Executive Officer's approval prior to implementation.
- 5. In accordance with California Business and Professions Code Sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of California registered professionals (i.e., civil engineer, engineering geologist, geologist, etc.) competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal.
- 6. Failure to comply with the terms of this Order may result in administrative civil liability of up to \$10,000 per day for each violation pursuant to Sections 13263.3(g) and13385. In addition, if, in the opinion of the Regional Board's Executive Officer, the Discharger fails to comply with this Order, the Executive Officer may issue a Complaint against the Discharger under Article 2.5, Chapter 5, Division 7 of the CWC, and seek the appropriate administrative civil liability and/or request the Attorney General to take appropriate action against the Discharger, including injunctive relief and civil monetary liability as deemed appropriate.

I, Robert Perdue, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the Regional Water Quality Control Board, Colorado River Basin Region, on June 17, 2010.

ROBERT PERPUE
Executive Officer





William R. Teague, President
Richard Friestad, Vice-President
Merritt W. Wiseman, Secretary/Treasurer
Mike Duran, Director
Doug A. York, Director
General Manager:
Rex Sharp

May 6, 2010

Doug Wylie Regional Water Quality Control Board Colorado River Basin Region 73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92201

Subject: Request for a Cease and Desist Order for Copper and Heptachlor.

Dear Mr. Wylie

Valley Sanitary District (VSD) is requesting a Cease and Desist Order be adopted by the Regional Water Quality Control Board (RWQCB), concurrent with the adoption of VSD's NPDES Permit renewal, for discharge of copper and heptachlor. The NPDES Permit is currently slated for adoption at the Regional Board Meeting of June 17, 2010.

During the permit renewal process, VSD was made aware that two new discharge limits would be included in the new NPDES Permit. The two limits are for heptachlor and copper. These limits are the result of the reasonable potential analysis associated with the California Toxic Rule. The copper and heptachlor limits were triggered by the laboratory test results from the annual priority pollutant testing of September 2009. This testing indicated effluent concentrations of heptachlor at 0.01 parts per billion (ppb) and copper at 11 ppb. Subsequent to our being made aware that copper and heptachlor limits would be placed in our new permit, we have conducted additional effluent testing in an attempt to determine the probability that the facility discharge will be in frequent violation of these new effluent limits. Thus far we have received the laboratory results for eight weeks of the additional sampling. The results of this additional sampling have indicated copper concentrations ranging from not detected (ND) to 5.7 ppb and a single detection of heptachlor at 0.02 ppb with all other sample results reported as ND for heptachlor. Based on these results, we conclude that once the new permit goes into effect our facility discharge will likely experience repeated violations of the new heptachlor limits and that there is a significant potential of repeated violations of the new copper limits. We are therefore requesting Valley Sanitary District be placed under a Cease and Desist Order, relative to discharges of copper and heptachlor, in order to allow sufficient time for VSD

45-500 VAN BUREN, INDIO, CA 92201 (760) 347-2356 FAX (760) 347-9979

to determine and implement effective methods that will ensure the discharge from our facility will meet the new effluent limits for copper and heptachlor.

District staff researched the use of heptachlor and found that it was used widely in the early 60's and 70's as a pesticide. Heptachlor was banded in the late 70's as a general use pesticide. Heptachlor is now a highly controlled pesticide. Currently the only approved use for heptachlor is for the control of fire ants in dry utility vaults. We have contacted the Coachella Valley Mosquito Vector Control District, the City of Indio and the Riverside County Agricultural Department to determine if they use or have any knowledge or records of heptachlor use in the Indio area. All three agencies responded that they do not use products that contain heptachlor and do not have record or knowledge of its current use within the Indio area. District staff visited the local hardware stores and checked products used for ant control and did not find any products containing heptachlor. At the suggestion of RWQCB staff, District staff contacted Chuck Durham of Tetra Tech and asked if he had any suggestions on possible sources of heptachlor. Mr. Durham, in addition to his discussion of heptachlor's former approved uses as a pesticide and possible methods that this legacy pesticide could be entering the effluent, also suggested that the detection of heptachlor in the effluent could be false positives from test method specific interferences or as a result of a disinfection by-product from chlorination.

Because of the low levels of heptachlor that are being detected in the effluent and the inconsistency of its detection, tracing heptachlor to a potential source will be very difficult and time consuming. District staff is currently working with laboratory consultants to try and determine if the detection of heptachlor in the effluent is in reality the result of interferences in the heptachlor laboratory testing. In addition, we will continue to look at resources that may provide answers to either the removal or elimination of heptachlor from the system.

The District has recently completed Construction Phase 1 of a multi-phased expansion of the activated sludge plant. Construction Phase 1 increased the capacity of the activated sludge plant from 5.0 million gallons per day (MGD) to 7.5 MGD. Construction Phase 2A will increase the discharge capacity to 10.0 MGD when this phase of the plant expansion is completed. Part of the Construction Phase 1 project was the interim elimination of primary sedimentation by the conversion of primary clarifiers to selectors for filamentous bacteria control. Because the apparent increase in the effluent concentrations of copper and heptachlor appear to coincide with the interim elimination of primary sedimentation, it is possible that the present lack of primary sedimentation is allowing slightly higher concentrations of heptachlor and copper to pass through the treatment process. If this is the case, the levels of heptachlor and copper in the effluent will likely again be reduced to acceptable levels following completion of Construction Phase 2A as a result of the installation of new primary clarifiers along with chemical dosing facilities to enhance primary sedimentation. The District anticipates starting Construction Phase 2A early in the 2010/2011 Fiscal Year and, barring construction delays, anticipates the project will be complete at the end of 2011.

Should you have any questions regarding this request for a Cease and Desist Order for copper and heptachlor or need any additional information, please call me at (760) 347-2356.

Sincerely,

Mike Lopanec

Chief Plant Operator

Valley Sanitary District