CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER NO. R5-2008-0163

REQUIRING THE SACRAMENTO AREA SEWER DISTRICT
WALNUT GROVE WASTEWATER TREATMENT PLANT
SACRAMENTO COUNTY

TO COMPLY WITH REQUIREMENTS PRESCRIBED IN
ORDER NO. R5-2003-0084 AS AMENDED
(NPDES PERMIT NO. CA0078794)

The California Regional Water Quality Control Board, Central Valley Region, (hereinafter Regional Water Board) finds that:

1. On 6 June 2003, the Regional Water Board adopted Waste Discharge Requirements (WDR) Order No. R5-2003-0084 (NPDES Permit No. CA0078794), prescribing waste discharge requirements for the Sacramento Area Sewer District (formerly Sacramento County Sanitation District No. 1) (hereinafter Discharger) at the Walnut Grove Wastewater Treatment Plant, Sacramento County.

2. The Discharger completed an *Engineering Feasibility Study for Courtland and Walnut Grove Wastewater Treatment Plants* (Feasibility Report) and submitted a copy to the Regional Water Board on 17 February 2004. Based on the findings of the Feasibility Report, the Discharger concluded that the cost effective alternative was to construct a pipeline from the two facilities (Walnut Grove and Courtland) and convey untreated wastewater to the Sacramento Regional Wastewater Treatment Plant (SRWTP), ten miles north of the facilities. The Discharger's timeline and schedule estimated implementation and completion of this alternative by 1 April 2008.

3. The Discharger requested revisions to Order No. R5-2003-0084 to allow the Discharger to proceed with connection to the SRWTP. On 15 October 2004, the Regional Water Board adopted Resolution No. R5-2004-0143, amending Order No. R5-2003-0084 by providing conditional delays in treatment improvements and monitoring requirements pending construction of a wastewater conveyance pipeline and connection to SRWTP by 1 April 2008. The amended time schedule also required full compliance with the Order and abandonment of the existing treatment facility by 1 June 2008.

4. On 4 June 2007, the Discharger informed Regional Water Board staff that the project to connect to the SRWTP had been delayed due to various complexities associated with the design and construction of the pipeline project. The Discharger submitted an updated construction schedule indicating completion of final plans and specifications by 6 September 2007, solicitation of bids by 14 November 2007, and project completion by 1 November 2008. As a result, the Discharger requested additional modifications to the provisions and monitoring requirements in the Order. On 26 October 2007 the Regional Water Board adopted Resolution No. R5-2007-0144, amending Order No. R5-2003-0084 to prevent the Discharger from incurring unnecessary costs for a facility that will be abandoned.

5. By letter dated 15 August 2008, the Discharger informed Regional Water Board staff that the pipeline alignment encountered an unanticipated and unexpected impediment that was beyond the control of the Discharger and that the impediment would affect completion of the pipeline and would require the Discharger to reevaluate the pipeline alignment. Due to the delay, the Discharger may not be able to comply with the Discharge Prohibition, final effluent limitations and other permit provisions in Order No. R5-2003-0084, as amended.

   The Discharger evaluated several contingency plans to avoid the need for a surface water discharge, including (1) bypass pumping; (2) creation of additional pond capacity; and (3) transporting wastewater to the SRWTP via trucks and/or barges. Each contingency has risks and costs that make them infeasible.

6. WDR Order No. R5-2003-0084 as amended, contains Discharge Prohibitions A.6 which reads as follows:

   6. Effective **1 June 2008**, the discharge of wastes to surface waters is prohibited.

7. WDR Order No. R5-2003-0084 includes Final Effluent Limitations B.1., which reads as follows:

   *1. Effluent shall not exceed the following limits (after **1 June 2008**):*

Constituents (units)		***Monthly Average***	***Weekly Average***	***Daily Maximum***	***4-day Average***	***1-hour Average***
BOD[1]	*mg/l* *lbs/day[2]*	*10* *42*	*15* *63*	*20* *84*		
Total Suspended Solids	*mg/l* *lbs/day[2]*	*10* *42*	*15* *63*	*20* *84*		
Chlorine Residual	*mg/l* *lbs/day[2]*	*--*		*--*	*0.01* *0.04*	*0.02* *0,08*
Settleable Matter	*ml/l*	*0.1*		*0.2*		
Dissolved Oxygen	*mg/l*			*<5[5]*		
Turbidity[3]	*NTU*	*2.0*		*5.0*		
Total Coliform[4]	*MPN/100 ml*	*2.2 (median)*		*23*		
Total Dissolved Solids	*mg/l* *lbs/day[2]*	*450* *1876*		*1000* *4170*		
Chloride	*mg/l* *lbs/day[2]*	*106* *442*		*250* *1042*		
Oil & Grease	*mg/l*	*10*		*15*		

Constituents (units)		***Monthly Average***	***Weekly Average***	***Daily Maximum***	***4-day Average***	***1-hour Average***
Ammonia	*mg N/l* *lbs/day*[2]	*(see attached Table E & F)*				
Arsenic	*µg/l* *lbs/day*[2]	*10* *0.042*				
Cyanide	*µg/l* *lbs/day*[2]	*4.2* *0.018*		*8.4* *0.036*		
Manganese	*µg/l* *lbs/day*[2]	*50* *0.21*		*--* *--*		
Total Trihalomethanes	*µg/l* *lbs/day*[2]	*80* *0.0046*		*--* *--*		
Bromodichloromethane	*µg/l* *lbs/day*[2]	*0.56* *0.0025*		*1.1* *0.05*		
Dibromochloromethane	*µg/l* *lbs/day*[2]	*0.41* *0.0017*		*0.82* *0.0034*		
Bis-2 ethylhexyl phthalate	*µg/l* *lbs/day*[2]	*1.8* *0.0075*		*3.6* *0.015*		

[1] *5-day, 20°C biochemical oxygen demand.*
[2] *Based upon a design monthly average flow capacity of 0.5 mgd*
[3] *The daily max of 5 NTU must not exceed 5% of the time within 24-hr period. The daily average must not exceed 2 NTU.*
[4] *In a 30-day period, only a single sample may exceed 23 MPN/100ml and no sample should exceed 240 MPN/100ml.*
[5] *The dissolved oxygen content of the effluent shall at all times be greater than 5.0 mg/l.*

8. WDR Order No. R5-2003-0084 as amended includes Effluent Limitation B.4, which reads as follows:

   *4. Beginning **1 June 2008**, wastewater shall be oxidized, coagulated and filtered, or equivalent treatment provided.*

9. WDR Order No. R5-2003-0084 as amended includes Effluent Limitation B.5, which reads as follows:

   5. Beginning 1 June 2008, the arithmetic mean of 20°C BOD (5-day) and total suspended solids in effluent samples collected over a monthly period shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period (85 percent removal).

10. WDR Order No. R5-2003-0084 as amended includes Effluent Limit C.5, which reads as follows:

    5. Percolation/Evaporation ponds shall not have a pH less than 6.5 or greater than 10 averaged over 24-hr period, and effective 1 June 2008, percolation/evaporation ponds shall not have a pH less than 6.5 or greater than 9.0 averaged over 24-hr period.

11. WDR Order No. R5-2003-0084 as amended includes Receiving Water Limits, which reads, in part as follows:

The discharge shall not cause the following in the receiving water:

1. Beginning 1 June 2008, concentrations of dissolved oxygen to fall below 5 mg/l.

8. Beginning 1 June 2008, the ambient temperature to increase more than 5°F.

12. WDR Order No. R5-2003-0084 as amended includes Provision G.3, which reads in part as follows:

3. The Discharger as a means of compliance with the new requirements in Order No. R5-2003-0084 has proposed the construction of a pipeline to connect to the Sacramento Regional Wastewater Treatment Plant, and abandonment of the existing Walnut Grove Wastewater Treatment Plant. The Discharger shall cease discharge to surface waters in accordance with the following time schedule:

Task	*Date Due*
Cease the discharge to surface waters	***1 June 2008***

13. WDR Order No. R5-2003-0084 as amended also includes Provision G.6, which reads in part as follows:

*6. Findings No. 14, 15, 16 and 34 of this Order conclude that in order to protect the beneficial uses of municipal and domestic water supply, body contact recreation and agricultural irrigation, and comply with final effluent limits for total coliform, turbidity, BOD, DO, and TSS, the Discharger shall provide **tertiary or advanced treatment, equivalent treatment** capabilities, or studies necessary to change the designated beneficial uses of the receiving waters, in accordance with the following time schedule. Alternative means of compliance may be proposed as discussed in Finding 33.*

Task	*Compliance Date*
Complete Construction	***1 March 2008***
Full Compliance	***1 June 2008***

14. California Water Code (CWC) section 13300 states: "*Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements.*"

15. In accordance with CWC section 13300 and 13385(j)(3), the Regional Water Board finds that there is a discharge of waste threatening to take place that will violate requirements prescribed by the regional board, and that the Discharger may not be able to comply with the Discharge Prohibition A.6, Effluent Limitations B.1 for BOD, total suspended solids, chlorine residual, settleable matter, dissolved oxygen, turbidity, total coliform, total dissolved solids, chloride, oil & grease, ammonia, arsenic, cyanide, manganese, total trihalomethanes, bromodichloromethane, dibromochloromethane and bis-2 ethylhexyl phthalate, and B.4, B.5, C.5, Receiving Water Limits E.1 and E.8, and Provisions G.3 and G.6. These limitations are new requirements that become applicable to the Order after the effective date of adoption of the waste discharge requirements, and after 1 July 2000, for which new or modified control measures are necessary in order to comply with the limitations, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

16. Immediate compliance with the discharge prohibition, effluent limitations for BOD, total suspended solids, dissolved oxygen, turbidity, total coliform, total dissolved solids, chloride, ammonia, arsenic, cyanide, manganese, total trihalomethanes, bromodichloromethane, dibromochloromethane and bis-2 ethylhexyl phthalate, effluent limitations B.4, B.5 and C.5, Receiving Water Limits E.1 and E.8, and Provisions G.3 and G.6 is not possible or practicable. The Clean Water Act and the California Water Code authorize time schedules for achieving compliance.

17. CWC section 13385(h) and (i) require the Regional Water 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.*"

18. Compliance with this Order exempts the Discharger from mandatory penalties for violations of Effluent Limitations B.1. for BOD, total suspended solids, dissolved oxygen, turbidity, total coliform, total dissolved solids, chloride, ammonia, arsenic, cyanide, manganese, total trihalomethanes, bromodichloromethane, dibromochloromethane, and bis-2 ethylhexyl phthalate, Effluent Limitations B.4., and Effluent Limitations B.5., in accordance with CWC section 13385(j)(3). CWC section 13385(j)(3) requires the Discharger to prepare and implement a pollution prevention plan pursuant to section 13263.3 of the California Water Code.

19. Since the time schedules for completion of action necessary to bring the waste discharge into compliance exceeds 1 year, this Order includes interim requirements and dates for their achievement. The time schedule does not exceed 5 years. The compliance time schedule in this Order includes interim effluent limitations for BOD, total suspended solids, dissolved oxygen, total coliform, total dissolved solids, chloride, ammonia, arsenic, cyanide, manganese, total trihalomethanes, bromodichloromethane, dibromochloromethane and bis-2 ethylhexyl phthalate.

The interim effluent limitations for total dissolved solids, chloride, ammonia, arsenic, cyanide, manganese, bromodichloromethane, dibromochloromethane, and bis-2 ethylhexyl phthalate consist of a maximum daily effluent concentration derived using sample data provided by the Discharger. In developing the interim limitations, where there are ten sampling data points or more, sampling and laboratory variability is accounted for by establishing interim limits that are based on normally distributed data where 99.9% of the data points will lie within 3.3 standard deviations of the mean (*Basic Statistical Methods for Engineers and Scientists, Kennedy and Neville, Harper and Row*). Therefore, the interim limitations for these constituents are established as the mean plus 3.3 standard deviations of the available data. Where actual sampling shows an exceedance of the proposed 3.3-standard deviation interim limit, the maximum detected concentration has been established as the interim limitation.

For total trihalomethanes (i.e the sum of bromodichloromethane, dibromochloromethane, chloroform, and bromoform) there was insufficient data to calculate a performance-based interim effluent limit, which makes it impracticable to develop an interim limitation. Therefore, this Order does not include an interim effluent limitation for total trihalomethanes. The Regional Water Board finds that the interim effluent limitations for bromodichloromethane and dibromochloromethane, in which there was sufficient data to calculate interim limits, will effectively control the discharge of total trihalomethanes.

The interim effluent limitations for BOD, TSS, and total coliform were establish in this Order as the technology-based interim effluent limitations specified in Effluent Limitations B.2. of Order No. R5-2003-0084. For dissolved oxygen, the interim effluent limitations are the same in magnitude as required in Order No. R5-2003-0084 (5 mg/L), but established as an average monthly, based on the performance of the Facility.

20. The Regional Water Board finds that the Discharger can undertake treatment plant measures to maintain compliance with the interim limitations included in this Order. Interim limitations are established when compliance with the final effluent limitations cannot be achieved by the existing discharge. Discharge of constituents in concentrations in excess of the final effluent limitations, but in compliance with the interim effluent limitations, can significantly degrade water quality and adversely affect the beneficial uses of the receiving stream on a long-term basis. The interim limitations, however, establish an enforceable ceiling concentration until compliance with the effluent limitation can be achieved.

21. On **24 October 2008**, in Sacramento, California, after due notice to the Discharger and all other affected persons, the Regional Water Board conducted a public hearing at which evidence was received to consider a Time Schedule Order under CWC section 13300 to establish a time schedule to achieve compliance with waste discharge requirements.

22. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000, et seq.), in accordance with CWC section 15321 (a)(2), Title 14, of the California Code of Regulations.

23. Any person adversely affected by this action of the Regional Water Board may petition the State Water Resources Control Board to review this action. The petition must be

received by the State Water Resources Control Board, Office of the Chief Counsel, P.O. Box 100, Sacramento, CA 95812-0100, within 30 days of the date on which this action was taken. Copies of the law and regulations applicable to filing petitions will be provided on request.

IT IS HEREBY ORDERED THAT:

1. The Discharger shall comply with the following time schedule for compliance with Discharge Prohibition A.6., Effluent Limitations B.1. for BOD, total suspended solids, dissolved oxygen, turbidity, total coliform, total dissolved solids, chloride, ammonia, arsenic, cyanide, manganese, total trihalomethanes, bromodichloromethane, dibromochloromethane, and bis-2 ethylhexyl phthalate, Effluent Limitations B.4., Effluent Limitations B.5., Effluent Limitations C.5., Receiving Water Limitations E.1 and E.8, and Provisions G.3 and G.6. by **1 June 2010**:

Task	**Date Due**
Submit Revised Pipeline Alignment, Detailed Schedule for Obtaining Easements and Permits, and Construction Schedule for Remaining Activities	**Within 1 month of adoption of this Order**
Submit and implement a Pollution Prevention plan (PPP)[1] pursuant to CWC section 13263.3	**Within 60 days of adoption of this Order**
Progress Reports[2]	**Quarterly**, starting **1 December 2008** until final compliance
Full Compliance[3]	**1 June 2010**

[1] The PPP shall be prepared for total dissolved solids, chloride, ammonia, arsenic, cyanide, manganese, total trihalomethanes, bromodichloromethane, dibromochloromethane and bis-2 ethylhexyl phthalate, and shall meet the requirements specified in CWC section 13263.3(d)(3).

[2] The progress reports shall detail what steps have been implemented towards completing the project for connection to the Sacramento Regional Wastewater Treatment Plant, including studies, construction progress, evaluation of measures implemented, and recommendations for additional measures as necessary to cease discharging to surface waters from the Facility by 1 June 2010.

[3] Full compliance may be demonstrated by ceasing the discharge to surface waters from the Facility by the final compliance date.

2. The following interim effluent limitations shall be effective immediately. The Discharger shall maintain compliance with the following interim effluent limitations for discharges to the Drainage Ditch, as described in Order No. R5-2003-0084. The interim effluent limitations shall be effective until **1 June 2010**.

Parameter	Units	Interim Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Ammonia, Total (as N)	mg/L	--	--	9.1
	lbs/day[1]	--	--	37.9
Arsenic	µg/L	--	--	81
Bis(2-ethylhexyl) phthalate	µg/L	--	--	18
Bromodichloromethane	µg/L	--	--	122
Chloride	mg/L	--	--	540
Cyanide, Total Recoverable	µg/L	--	--	159
Dibromochloromethane	µg/L	--	--	24
Dissolved Oxygen	mg/L	5[5]	--	--
Manganese, Total Recoverable	µg/L	--	--	293
Total Coliform Organisms	MPN/100ml	23[3]	--	500
Total Dissolved Solids	mg/L	--	--	1135
Total Suspended Solids (TSS)	mg/L	95	--	--
	lbs/day[1]	396	--	--
	% removal	65[4]	--	--
5-Day Biochemical Oxygen Demand (20 °C)	mg/L	45	60	90
	lbs/day[1]	188	250	375
	% removal	65[4]	--	--

1 Based on a design monthly average flow capacity of 0.5 million gallons per day
2 Weekly average
3 Monthly median
4 The arithmetic mean of 20°C BOD (5-day) and TSS in effluent samples collected over a monthly period shall not exceed 35 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period (65 percent removal).
5 The effluent dissolved oxygen concentration shall not be less than 5 mg/L on a monthly average.

3. For the compliance schedules required by this Order, the Discharger shall submit to the Regional Water Board on or before each compliance report due date, the specified document or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, and shall include an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Water Board by letter when it returns to compliance with the time schedule.

4. If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may apply to the Attorney General for judicial enforcement. If compliance with these effluent limitations is not achieved by the Full Compliance date, the discharge would not be exempt from the mandatory minimum penalties for violation of certain effluent limitations, and would be subject to issuance of a Cease and Desist Order in accordance with CWC section 13301.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on **24 October 2008**

Original Signed by
PAMELA C CREEDON, Executive Officer