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

### TIME SCHEDULE ORDER NO. R4-2003-0161

# REQUIRING THE CITY OF SANTA PAULA TO UNDERTAKE ACTIONS TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER NUMBER 97-041 (Santa Paula Water Reclamation Facility) (NPDES PERMIT NO. CA0054224)

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

### BACKGROUND

- 1. The City of Santa Paula (hereafter City or Discharger) discharges waste from the Santa Paula Water Reclamation Facility (hereafter Santa Paula WRF or Plant) under Waste Discharge Requirements (WDRs) contained in Order No. 97-041, adopted by this Regional Board on April 4, 1997. Order No. 97-041 serves as the National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0054224).
- 2. Santa Paula WRF, a publicly owned treatment works (POTW), is located at 905 Corporation Street, Santa Paula, California. Operations Management International, Inc. (OMI) operates the Santa Paula WRF under contract with the City. The plant has a design capacity of 2.55 million gallons per day (mgd) and serves an approximate population of 28,500 people.
- 3. Santa Paula WRF is an advanced secondary wastewater treatment plant (trickling filter) built in the 1939 and is not consistently able to meet the limits prescribed in NPDES Order No. 97-041 for biochemical oxygen demand (BOD), total suspended solids (TSS), turbidity, and coliform. In the past several years, the Discharger violated effluent limits for these parameters on many occasions. The Regional Board has issued several Notices of Violation (NOVs) and, ordered the City to make the necessary modifications to the Plant to bring it into compliance. Currently, the Santa Paula WRF is making modifications to its treatment process to achieve higher removal efficiency for BOD, TSS, turbidity and coliform.
- 4. The following table provides the effluent limits for BOD, TSS, turbidity, and coliform which are prescribed in accordance with the treatment standards contained in Order No. 97-041.

		Discharge Limitations		
		30-Day	7-Day	Daily
Constituent	<u>Units</u>	Average	Average	<u>Maximum</u>
Biochemical oxygen demand	mg/L	20	30	45
(BOD <sub>5</sub> 20°C)	lbs/day [1]	425	638	957
% BOD Removal		85%		
Total suspended solids	mg/L	15	40	45
	lbs/day [1]	319	851	957
% TSS Removal		85%		

### Footnotes

[1] The mass-based limit is based on the average annual NPDES flow of 2.55 mgd and does not apply during storm events.

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### Turbidity:

The turbidity of the effluent shall not exceed a daily average of 2 Nephelometric turbidity unit (NTUs)

<u>Coliform</u>: Effluent shall comply with the following limits for coliform bacteria:

- a. The median number of coliform organism shall not exceed 2.2 per 100 milliliters, determined from the results of the last 7 days for which analysis has been completed.
- b. Number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample within 30-day period.

### PLANT UPGRADES

- 5. Santa Paula WRF had been going through a series of improvement projects since 1930 that have increased the plant treatment capacity from 1.0 million gallons per day (mgd) to the current 2.55 mgd. The last major improvements occurred in the early 1980s, and were designed to meet the then-imposed requirements, somewhat above the secondary treatment requirements.
- 6. In December 1997, after the adoption of the NPDES permit, the City engaged an environmental engineering firm to study the needed improvements. In February 2000, the final report (*Wastewater Treatment and Reclamation Facilities Improvement Needs*) indicated that the Santa Paula WRF's existing wastewater treatment facilities can not provide means of meeting the effluent limits for BOD, TSS and Turbidity set forth in Order No. 97-041. To comply with the permit limits, several alternatives including plant upgrades and building a new plant have been proposed and evaluated. However, over

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the past years, the City has not yet constructed a new plant or made substantial upgrades to the existing plant.

- 7. On March 20, 2003, Regional Board requested the City to submit a plan for the Santa Paula WRF to upgrade it to meet the requirements in the NPDES permit or to submit a time table for the proposed construction of a new regional plant to replace the Santa Paula WRF and, jointly with the City of Fillmore, the Fillmore Wastewater Treatment Plant, that will result in producing an effluent that meets all effluent requirements contained in the permits.
- 8. In response to the Regional Board's letter, on May 20, 2003, the City informed the Regional Board that the City plans to build a new regional Wastewater Treatment Facility (WTF) that will be constructed and operated jointly with the City of Fillmore. The City also proposed a tentative time schedule for the construction of a new Regional WTF. According to the proposed schedule, the construction of the new regional WTF will be completed by the spring of 2007. Some of the milestone dates are as follows:

# Task Completion Date

•	Approve EIR	July 2004
•	Complete the regional plant design	Winter 2004
•	Begin construction of the regional plant	Summer 2005
•	Complete construction of the regional plant	Spring 2007

 Currently, the City is in dialogue with City of Fillmore to build a new Joint Regional Plant in Santa Paula to treat wastewater from both cities. The CEQA process has commenced and both cities expect to begin preparation of an Environmental Impact Report for this project.

## NEED FOR ORDER AND LEGAL BASIS

- During the new regional plant construction period, the Discharger cannot achieve full compliance with the prescribed limits for BOD, TSS, turbidity, and coliform because of the existing plant's physical configuration and capacity limitations. Therefore, the City and OMI have requested interim limits for these pollutants according to the secondary treatment standards contained in 40 CFR section 133.105 Treatment equivalent to secondary treatment and past plant performance.
- 11. Santa Paula WRF also may not be able to achieve compliance with the effluent limitations for nitrate plus nitrite as nitrogen measured as an daily maximum of 10 mg/L and for residual chlorine measured as daily maximum of 0.1 mg/L contained in Order No. 97-041. The noncompliance associated with residual chlorine limit was caused by the high turbidity and TSS in the final effluent. Thus, this TSO provides interim limit for nitrate plus nitrite as nitrogen and interim requirements for the determination of compliance with residual chlorine limit while the discharge is brought into compliance.

- 12. To achieve compliance with the nitrate plus nitrite as nitrogen effluent limitations, the City will be required to prepare a Pollution Prevention Plan and a Pollution Control Plan for this pollutant.
- 13. Water Code 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."

- 14. The Regional Board has delegated to its Executive Officer all powers and duties authorized by Water Code section 13223. This power includes the authority to issue time schedule orders pursuant to Water Code section 13300.
- 15. The Discharger cannot achieve immediate compliance with the requirements of those listed in Order No. 97-041, and as a result a discharge of waste is taking place and threatens to continue that violates requirements prescribed by the Regional Board. Therefore, this Order requires the Discharger to undertake actions to comply with the requirements and establishes interim requirements.
- 16. Exceedances of the NPDES limits for constituents for BOD, TSS, turbidity, coliform and nitrate plus nitrite as nitrogen are not subject to CWC Section 13385 subdivisions (h) and (i) as long as the Discharger complies with all of the requirements of the TSO; does not exceed the interim limits; and meets requirements A through D of CWC Section 13385(j)(3).
- 17. This TSO requires the Discharger to continue implementing the tasks associated with a new regional WRT that will allow the Discharger to achieve full compliance with permit limits prescribed in NPDES Order No. 97-041 for BOD, TSS, turbidity, nitrate+nitrite as nitrogen, and coliform, and prescribes interim limits for these constituents for the Santa Paula WRF to comply until the full compliance date.
- 18. The Regional Board has notified the Discharger, interested agencies and persons, of its intent to issue a Time Schedule Order concerning violations or threatened violations of waste discharge requirements.
- 19. The Regional Board received comments on a draft NPDES permit and TSO prior to a duly noticed regular Board meeting on October 2, 2003. All orders referred to above and submittals for the October 2 meeting are included herein by reference. The Regional Board's administrative record in this matter was considered in developing this Order.

- 20. At its October 2, 2003, meeting and at the request of the Discharger, the Regional Board deferred adoption of an NPDES permit and companion Time Schedule Order in order to address other issues. It is likely that the Regional Board will consider the reissuance of the NPDES permit and a companion Time Schedule Order in the spring of 2004. In the interim, the Discharger cannot consistently meet the limits prescribed in NPDES Order No. 97-041 for BOD, total suspended solids (TSS), turbidity, and coliform. As a result, the Executive Officer is issuing this Order to commit the City of Santa Paula to initiate activities to upgrade the treatment plant and to serve as a bridge until the Regional Board takes further action.
- 21. This enforcement action by a regulatory agency is exempt from the provisions of the California Environmental Quality Act (Public Resources, Code, Section 21100 et seq.) in accordance with Section 15321, Chapter 3, Title 14, California Code of Regulations.
- 22. 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, P.O. Box 100, Sacramento, California, 95812, within 30 days of adoption of this Order.

**IT IS HEREBY ORDERED** that, pursuant to the California Water Code section 13300, the City of Santa Paula, as owner of the Santa Paula Water Reclamation Facility, shall immediately comply with the following interim effluent limits and requirements:

### 1. Interim Effluent Limits:

Constituent	Units	Monthly Average [1]	Weekly Average [2]	Instantaneous Maximum
BOD	mg/L	45	65	
	lbs/day <sup>[3]</sup>	960	1380	
% BOD Removal at least	%	65% *		
TSS	mg/L	45	65	
	lbs/day <sup>[4]</sup>	960	1380	
% TSS Removal at least	%	65% *		
Turbidity	NTU	44 <sup>[3]</sup>		
Nitrate+Nitrite as nitrogen	mg/L	14 <sup>[3]</sup>		
	lbs/day <sup>[4]</sup>	300		
Total residual chlorine	mg/L			0.1 <sup>[5]</sup>

### Footnotes:

[1] Average Monthly Discharge Limitation means the highest allowable average of daily discharge over a calendar month, calculated as the sum of all daily discharges measures during that month divided by the number of days on which monitoring was performed.

- [2] <u>Average Weekly Discharge Limitation</u> means the highest allowable average of daily discharge over a calendar week, calculated as the sum of all daily discharges measures during that week divided by the number of days on which monitoring was performed.
- The Interim limit is based on effluent performance data from July 1997 through December 2002 for the Santa Paula WRF. The monthly average interim effluent limit was derived statistically as the 99% confidence level of the 95th percentile, using the P-limit software. This program incorporates the procedure in Appendix E of the Technical Support Document (TSD) For Water Quality-based Toxics Control [EPA/505/2-90-001] for the limit calculation.
- [4] The mass emission rates are based on the plant design flow of 2.55 mgd. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.
- [5] For the determination of compliance with total residual chlorine limit, one of the following applies:
  - a. Total residual chlorine concentration excursions of up to 0.3 mg/L, at the point in treatment train immediately following dechlorination, shall not be considered violations of this requirement provided the total duration of such excursions do not exceed 15 minutes during any calendar day. Peaks in excess of 0.3 mg/L lasting less than one minute shall not be considered a violation of this requirement; or
  - b. For continuous total residual chlorine recording devices that require greater than one minute to level off after the detection of a spike: if it can be demonstrated that a stoichiometrically appropriate amount of dechlorination chemical has been added to effectively dechlorinate the effluent to 0.1 mg/L or less, then the exceedance over one minute, but not for more than five minutes, will not be considered to be a violation.
- \* These interim limits are based on 40 CFR section 133.105 Treatment equivalent to secondary treatment. To be consistent with this regulation, the interim limits for the monthly average (30-day average) and weekly average (7-day average) are prescribed.

Interim Effluent Coliform Limits: Effluent shall meet at least the coliform bacteria limit for receiving water as prescribed in the Basin Plan.

- 1. Geometric Mean Limits
  - a. E. coli density shall not exceed 126/100 ml.
  - b. Fecal coliform density shall not exceed 200/100 ml.
- 2. Single Sample Limits
  - a. E. coli density shall not exceed 235/100 ml.
  - b. Fecal coliform density shall not exceed 400/100 ml.

The geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period).

If any single sample limits are exceeded, the Regional Board may require repeat sampling on a daily basis until sample falls below the single sample limit in order to determine the persistence of the exceedance.

When repeat sampling is required because of an exceedance of any one single sample limit, values from all samples collected during that 30-day period will be used to calculate the geometric mean.

- 2. The City shall be in compliance with the interim limits all the time. Necessary modifications and or upgrade shall be made to the treatment plant to achieve higher removal efficiency for BOD and TSS in the event that the new plant is not constructed.
- 3. The City shall implement the tasks identified in Finding No. 8 to ensure ultimate compliance with the effluent limits contained in Order No. 97-041.
- 4. Submit by January 31, 2004, for Executive Officer approval, a work plan which contains the following tasks (with a timeline) to achieve the nitrate plus nitrite as nitrogen effluent limit of 10 mg/L:

### Task

- a. Nitrate plus Nitrite as Nitrogen Pollution Prevention Plan
- b. Nitrate plus Nitrite as Nitrogen Pollution Control Plan
- c. Implementation of Nitrate plus Nitrite as Nitrogen Control Measures
- d. Achievement date for full compliance with Nitrate plus Nitrite as Nitrogen limitation
- 5. Submit to the Regional Board quarterly progress reports to describe the following:
  - a. The progress of efforts to achieve compliance with the nitrate plus nitrite as nitrogen limit.
  - b. The progress on the construction of the new regional plant and any modifications in the existing plant.

Progress reports shall be submitted by the fifteenth day of the first month following the reporting quarter (January 15, April 15, July 15 and October 15). The first progress report shall be received at the Regional Board by April 15, 2004, and will cover the months of January through March 2004.

 If the City fails to comply with any provisions of this Order, the Executive Officer may issue an Administrative Civil Liability Complaint pursuant to California Water Code section 13323. The Regional Board may also refer the case to the Attorney General for injunctive and civil monetary remedies, pursuant to California Water Code sections 13331 and 13385. City of Santa Paula Santa Paula Water Reclamation Facility Time Schedule Order. R4-2003-0161 CA0054224

7. The Regional Board retains jurisdiction to take all appropriate enforcement actions, to consider subsequent modifications to this schedule and interim requirements, to consider subsequent modifications to waste discharge requirements, and to take other actions authorized by law that the Regional Board deems appropriate.

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- 8. All other limitations, provisions, and requirements contained in Order No. 97-041 which are not in conflict with this Order remain in full force and effect.
- 9. This Order shall remain in effect until June 1, 2004, and then shall expire unless the Regional Board takes further action.

Ordered by:		Date:	
	Dennis A. Dickerson		
	Executive Officer		