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

ORDER NO. R7-2004-0009 NPDES NO. CA7000009

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND WASTE DISCHARGE REQUIREMENTS FOR CITY OF CALEXICO, OWNER/OPERATOR; MUNICIPAL WASTEWATER TREATMENT PLANT WASTEWATER COLLECTION AND DISPOSAL SYSTEMS Calexico – Imperial County

The California Regional Water Quality Control Board, Colorado River Basin Region finds that:

- The City of Calexico, 608 Heber Avenue, Calexico, CA 92231, hereinafter referred to as the discharger, submitted an application to update its Waste Discharge Requirements (WDRs) and to renew its permit to discharge under the National Pollutant Discharge Elimination System (NPDES) Program. The wastewater treatment facility (WWTF) is located at 298 East Anza Road, Calexico, CA; in the NW ¼ of the SW ¼ of Section 14, T17S, R14E, SBB&M.
- 2. The City of Calexico owns the wastewater collection, treatment and disposal system (hereinafter referred to as the facility) and provides sewerage service to the City of Calexico. The wastewater treatment plant has a design treatment capacity of 4.3 million gallons-per-day (MGD).
- 3. The final effluent is discharged to the New River in the NE ¼ of the SW ¼ of Section 14, T17S, R14E, SBB&M. The New River conveys the effluent to the Salton Sea.
- 4. The facility provides secondary treatment through activated sludge and aerated lagoon treatment systems. The activated sludge and aerated lagoon treatment systems have design capacities of 2.5 MGD and 1.8 MGD, respectively. The overall design capacity for the treatment plant is 4.3 MGD. Wastewater is passed through preliminary, primary, and secondary treatment systems before being disinfected and discharged to the New River. The preliminary treatment systems consist of a mechanical bar screen, manual bypass bar screen, and aerated grit chamber. The primary treatment system consists of two primary clarifiers operated in parallel. Preliminary and primary treated wastewater is stabilized in either the activated sludge treatment system consisting of three aeration basins operated in parallel or the aerated lagoon treatment system consisting of four lagoons operated in series. Effluent wastewater from the activated sludge plant is passed through three secondary clarifiers operated in parallel before being combined with effluent wastewater from the aerated lagoon treatment system. The combined stabilized flows from the activated sludge plant and aerated lagoon plant are disinfected by an ultraviolet (UV) disinfection system before being discharged to the New River. Primary sludge generated from the primary clarifiers is pumped to two anaerobic digesters for stabilization. Secondary sludge generated from two of the three secondary clarifiers is also pumped to the anaerobic digesters for stabilization. Secondary sludge from the third secondary clarifier is pumped to a dissolved air thickener before being pumped to the anaerobic digesters for stabilization. Stabilized primary and secondary sludge is discharged from the two anaerobic digesters to fifteen sludge-drying beds.
- The discharger has been subject to an NPDES Permit and WDRs in Board Order No. 99-001 (NPDES No. CA7000009) adopted January 13, 1999, which allows for discharge to the New River.

- 6. Discharges of greater than 1.0 MGD are classified as Major by the United States Environmental Protection Agency (USEPA). Accordingly, Regional Board staff has classified this discharge as a Major Discharge.
- 7. The discharger reports that there are no known industrial wastes subject to regulation under the NPDES Pretreatment Program being discharged to the WWTP.
- 8. This Board Order updates the WDRs to comply with the current laws and regulations as set forth in the California Water Code and the California Code of Regulations.
- 9. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), as amended to date, designates the beneficial uses of ground and surface waters in this Region.
- 10. The designated beneficial uses for the New River are:
  - a. Freshwater Replenishment of the Salton Sea (FRSH)
  - b. Industrial Service Supply (IND<sup>1</sup>)
  - c. Water Contact Recreation (RECI<sup>2</sup>)
  - d. Non-Contact Water Recreation (RECII)
  - e. Warm Freshwater Habitat (WARM)
  - f. Wildlife Habitat (WILD)
  - g. Preservation of Rare, Threatened, or Endangered Species (RARE<sup>3</sup>)
- 11. The New River at the International Boundary (i.e., upstream of the discharge point) is dominated by wastes from the Mexicali Valley in Mexico. Downstream of the International Boundary and upstream of the discharge point, it also carries seasonal storm water runoff from the City of Calexico. In the last five (5) years dissolved oxygen (DO) upstream of the discharge point consistently averaged less than 1.0 mg/l, pH averaged 7.5, turbidity ranged from 10 to 45 NTU, and fecal coliform ranged from 11,000 to 300,000 MPN/100 mL.
- 12. The New River is listed as an impaired surface water pursuant to the provisions of Section 303(d) of the Federal Clean Water Act. The pollutants impairing the beneficial uses of the New River at the International Boundary are pathogens, volatile organic compounds (VOCs), nutrients, silt, pesticides, trash, and low concentrations of DO.
- 13. The proposed effluent limitations are as stringent or more stringent than those of the previous permit in accordance with anti-backsliding policies. As specified in 40 CFR Part 122.44(I), effluent limitations, standards, or conditions in reissued permits shall be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit.
- 14. Federal regulations for storm water discharges require specific categories of facilities which discharge storm water associated with industrial activity (storm water) to obtain NPDES permits and to implement Best Conventional Pollutant Technology (BCT) and Best Available Technology Economically Achievable (BAT) to reduce or eliminate industrial storm water pollution.

<sup>&</sup>lt;sup>1</sup> Potential use

<sup>&</sup>lt;sup>2</sup> Although some fishing occurs in the downstream reaches, the presently contaminated water in the river makes it unfit for any recreational use. An advisory has been issued by the Imperial County Health Department warning against the consumption of any fish caught from the river and the river has been posted with advisories against any body contact with the water.

<sup>&</sup>lt;sup>3</sup> Rare, endangered, or threatened wildlife exits 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 Board; and such substantiation must be provided within a reasonable time frame as approved by the Regional Board.

- 15. The action to adopt an NPDES Permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA: Public Resources Code Section 21000, et. seq.), pursuant to Section 13389 of the California Water Code.
- 16. In accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations, the issuance of these WDRs, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.)
- 17. The proposed discharge is consistent with the anti-degradation provisions of 40 CFR 131.12 and State Water Resources Control Board (SWRCB) Resolution No. 68-16. If terms of the permit are met, the impact on water quality will be insignificant, including potential impacts on aquatic life, which is the beneficial use most likely affected by the discharge.
- 18. The USEPA adopted the National Toxics Rule (NTR) (40 CFR 131.36). The NTR requires effluent limitation for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause, or contribute to an in-stream excursion above a narrative or numeric water quality standard.
- 19. The USEPA adopted the California Toxics Rule (CTR) (40 CFR 131.38). The CTR promulgates new criteria for both human health protection and protection of aquatic life. New numeric aquatic life criteria for 23 priority toxic pollutants and numeric human health criteria for 57 priority toxic pollutants are listed. In addition, the CTR contains a compliance schedule provision, which authorizes the State to issue schedules of compliance for new or revised NPDES permit limits based on the federal criteria when certain conditions are met.
- 20. On March 2, 2000, the SWRCB adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California (California Toxics Policy). This Policy establishes (1) implementation provisions for priority pollutant criteria promulgated by the USEPA through the NTR and CTR and for priority pollutant objectives established by the Regional Water Quality Control Boards (Regional Boards) in their water quality control plans; (2) monitoring requirements for 2, 3, 7, 8- tetrachlorodibenzo-p-dioxin (TCDD) equivalents; and (3) chronic toxicity control provisions.
- 21. On April 17, 2001, the Regional Board began receiving monitoring results for the Priority Pollutants monitoring submitted by the discharger as required by the CTR (40 CFR§ 131.38). Based on the Reasonable Potential Analysis methodology in the State Implementation Plan (Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California), the following constituents have been found to have reasonable potential to cause or contribute to an excursion above water quality objectives. The monitoring results indicate reasonable potential for Copper and Mercury.
- 22. On July 18, 2003, the Regional Board received a letter from the discharger providing an infeasibility report and request for a compliance schedule. The letter contained a proposed schedule with milestone requirements and completion dates.
- 23. The governing Water Quality Objective (WQO) for Copper is 3.10 ug/L, the saltwater aquatic life criteria contained in the CTR. As noted in Finding 21 of WDR No. R7-2004-0009, Copper has reasonable potential to exceed water quality objectives, and final Water Quality Based Effluent Limitations (WQBELs) are required. The WQBELs calculated pursuant to State Implementation Policy (SIP) procedures are 2.39 µg/L monthly average and 4.80 µg/L daily maximum. The Discharger indicated in its July 18, 2003, Feasibility Study that it is infeasible to comply

immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for Copper is appropriate. The previous permit did not contain an effluent limit for copper, and it is not possible to statistically determine current plant performance based on only four data points for Copper. Therefore, the interim effluent limit is the Maximum Effluent Concentration (MEC), 7.90  $\mu$ g/L. This interim effluent limit is based on the best professional judgment of Regional Board staff.

- 24. The governing Water Quality Objective (WQO) for Mercury is 0.051 ug/L, the human health criteria contained in the CTR. As noted in Finding 21 of WDR No. R7-2004-0009, Mercury has reasonable potential to exceed water quality objectives, and final Water Quality Based Effluent Limitations (WQBELs) are required. The WQBELs calculated pursuant to State Implementation Policy (SIP) procedures are 0.051 µg/L monthly average and 0.102 µg/L daily maximum. The Discharger indicated in its July 18, 2003, Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for Mercury is appropriate. The previous permit did not contain an effluent limit for Mercury, and it is not possible to statistically determine current plant performance based on only two data points for Mercury. The Maximum Effluent Concentration (MEC) was 0.080 µg/L. Therefore, the interim effluent limit is the Maximum Daily Effluent Limit (MDEL), 0.102 µg/L. This interim effluent limit is based on the best professional judgment of Regional Board staff.
- 25. The discharger is not able to consistently comply with the new effluent limitations for Copper and Mercury.
- 26. Corrective actions by the discharger are necessary in order for the discharge from the wastewater treatment plant to comply with the new effluent limits pursuant to the implementation of the CTR.
- 27. The USEPA established bacteriological water quality standards (bacteria densities) for the protection of human health with regards to waterborne pathogens. These USEPA standards are included as Water Quality Objectives (WQO) in the Colorado River Basin Regional Board Water Quality Control Plan. The discharger must comply with the WQO established in the Colorado River Basin Regional Board Water Quality Control Plan prior to the discharge of treated wastewater into the waters of the State.
- 28. Effluent and receiving water limitations in this Board Order are based on the Federal Clean Water Act, Basin Plan, SWRCB's plans and policies, USEPA guidance and regulations, and best conventional and practicable waste treatment technology.
- 29. Effluent limitations and toxic and pretreatment effluent standards, established pursuant to Section 208(b), 301, 302, 304, and 307 of the Federal Clean Water Act (CWA) and amendments thereto that are applicable to this discharge are implemented in this Board Order.
- 30. Regional Board staff prepared a Fact Sheet regarding the facility. The Fact Sheet is incorporated into this permit by this reference.
- 31. The Board has notified the discharger and all known interested agencies and persons of its intent to issue an NPDES Permit and WDRs for said discharge, and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
- 32. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Board Order No. 99-001 is terminated, and in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Clean Water Act, and regulations and guidelines adopted thereunder, the discharger shall comply with the following:

- A. Effluent Limitations
  - 1. Representative samples of wastewater discharged to the New River from the treatment systems shall not contain constituents in excess of the limits indicated below:

<u>Constituent</u>	<u>Unit</u>	30-Day Arithmetic Mean <u>Discharge Rate</u> <sup>4</sup>	7-Day Arithmetic Mean <u>Discharge Rate</u> ⁵
20° C BOD <sub>5</sub> <sup>6</sup>	mg/L <sup>7</sup>	30	45
	lb/day <sup>8</sup>	1,100 <sup>9</sup>	1,600
Total Suspended Solids	mg/L	36	53
	lb/day	1,300	1,900
Total Dissolved Solids	mg/L	4000	4500
	lb/day	140,000	160,000

- 2. The 30-day monthly average percent removal of the pollutant parameter BOD<sub>5</sub> and Total Suspended Solids shall not be less than 85 percent.
- 3. The hydrogen ion (pH) of the effluent shall be maintained within the limits of 6.0 to 9.0.
- 4. Wastewater effluent discharged to the New River shall not have a geometric mean *Escherichia coli* (E. coli) concentration in excess of 126 Most Probable Number (MPN) per 100 milliliters (based on a minimum of not less than five (5) samples for any 30-day period) nor shall any sample exceed 400 MPN per 100 milliliters. The compliance point for this effluent limitation shall be at a location acceptable to the Regional Board's Executive Officer or his designee.
- 5. There shall be no acute or chronic toxicity in the treatment plant effluent nor shall the treatment plant effluent cause any acute or chronic toxicity in the receiving water. All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, or bioassays of appropriate duration or other appropriate methods specified by the Regional Board.

<sup>&</sup>lt;sup>4</sup> 30 Day Mean- Arithmetic average of all samples collected during the calendar month

<sup>&</sup>lt;sup>5</sup> 7 Day Mean- Arithmetic average of all samples collected during a calendar week (Sunday through Saturday)

<sup>&</sup>lt;sup>6</sup> BOD<sub>5</sub> - Biochemical Oxygen Demand

<sup>&</sup>lt;sup>7</sup> mg/L - milligrams per Liter

<sup>&</sup>lt;sup>8</sup> lb/day - pounds per day (Calculated as flow rate (MGD) x 8.34 x Concentration (mg/L))

<sup>&</sup>lt;sup>9</sup> Based on a design treatment capacity of 4.3 MGD

6. Based on the Reasonable Potential Analysis, numeric Water Quality Based Effluent Limits are required for these constituents.

Constituents	Unit	Date Effluent Limit Becomes Effective	Average Monthly Effluent Limit <sup>10</sup>	Maximum Daily Effluent Limit <sup>10</sup>
Copper (interim)	µg/L	January 25, 2004	7.90	7.90
Copper (final)	µg/L	January 14, 2009	2.39	4.80
Mercury (interim)	µg/L	January 25, 2004	0.102	0.102
Mercury (final)	µg/L	January 14, 2009	0.051	0.102

- B. Receiving Water Limitations
  - 1. Receiving water limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this permit. The discharge shall not cause the following in the New River:
    - a. Depress the concentration of dissolved oxygen below 5.0 mg/L. When dissolved oxygen in the receiving water is already below 5.0 mg/L, the discharge shall not cause any further depression.
    - b. The presence of oil, grease, floating material (liquids, solids, foam and scum) or suspended material in amounts that create a nuisance or adversely affect beneficial uses.
    - c. The deposition of pesticides or combination of pesticides to be detected in concentrations that adversely affect beneficial uses.
    - d. Aesthetically undesirable discoloration in the receiving water.
    - e. A significant increase in fungi, slime, or other objectionable growth.
    - f. Increased turbidity that causes nuisance or adversely affects beneficial uses.
    - g. The normal ambient pH to fall below 6.0 or exceed 9.0 units.
    - h. The natural receiving water temperature at surface waters shall not be altered by discharges of wastewater unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses.
    - i. Result in the deposition of material that causes nuisance or adversely affects beneficial uses.
    - j. The chemical constituents to exceed concentrations that adversely affect beneficial uses or create nuisance.

<sup>&</sup>lt;sup>10</sup> Compliance with the Average Monthly Effluent Limit and Maximum Daily Effluent Limit shall be determined as described in Section 2.4.5 Compliance Determination (Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California)

- k. Toxic pollutants to be present in the water column, sediments or biota in concentrations that adversely affect beneficial uses or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
- I. Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to cause or otherwise adversely affect beneficial uses.
- 2. This discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the SWRCB as required by the Federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act or amendments thereto, the Regional Board will revise and modify this Permit in accordance with such more stringent standards.
- C. Prohibitions
  - 1. Bypass, overflow, discharge or spill of untreated or partially treated waste is prohibited.
  - 2. The discharge of waste to land not owned or controlled by the discharger is prohibited.
  - 3. Discharge of treated wastewater at a location or in a manner different from that described in Finding Nos. 2 through 4, above, is prohibited.
  - 4. The bypass or overflow of untreated wastewater or wastes to the New River is prohibited, except as allowed in the Standard Provision No. 13, as contained in the Standard Provisions for NPDES Permit (hereinafter Standard Provisions), dated October, 1990.
  - 5. The discharger shall not accept waste in excess of the design treatment capacity of the disposal system.
  - 6. The discharge shall not cause degradation of any water supply.

## D. Specifications

- 1. The treatment or disposal of wastes from the facility shall not cause pollution or nuisance as defined in Section 13050(I) and 13050(m) of Division 7 of the California Water Code.
- 2. A minimum depth of freeboard of two (2) feet shall be maintained at all times in ponds.
- 3. The permitted 30-day monthly average daily dry weather discharge flow shall not exceed 4.3 MGD.
- 4. The discharger shall take specific actions as indicated in the following table to achieve compliance with the new effluent limits pursuant to the implementation of the CTR:

Milestone	Completion Date	Milestone Description	Milestone Submittal
1	January 25, 2005	Continue to quantify levels of pollutants in the discharge and identify sources of the pollutants. A monitoring schedule will be implemented for source identification and evaluation.	Submit report and summary of test results

2	January 25, 2006	Document source control and/or pollution minimization efforts currently underway or completed.	Submit report and summary of source control and pollution minimization
3	January 25, 2007	Develop a pretreatment program and prepare an engineering study evaluating the need for plant optimization, expansion, and/or alternate resources to attain compliance with the CTR.	Submit pretreatment program and summary of all engineering reports and studies
4	January 25, 2008	Begin implementation of the pretreatment program. Obtain necessary approval from the Regional Water Quality Control Board and employ contractor services to begin changes or upgrades as needed to attain compliance with the CTR.	Summarize pretreatment program implementation milestones and any proposed changes and/or upgrades necessary at the facility
5	January 25, 2009	Complete all actions required to minimize pollutants as required to comply with the new effluent limits pursuant to the implementation of the CTR	Submit report and verification of compliance with CTR

- 5. Public contact with non-disinfected wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
- 6. The aerated lagoons shall be managed to prevent breeding of mosquitoes, in particular:
  - a. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface;
  - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
  - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
- 7. The aerated lagoons shall be maintained so they will be kept in aerobic conditions.
- 8. As a means of discerning compliance with Discharge Specification No. 7 for discharge to wastewater treatment ponds, the dissolved oxygen content in the upper zone (one (1) foot) of the aerated lagoons shall not be less than 1.0 mg/L.
- 9. On-site wastes shall be strictly confined to the lands specifically designated for the disposal operation.
- 10. Bioassays shall be performed to evaluate the toxicity of the discharged wastewater in accordance with the following procedures unless otherwise specified by the Regional Board's Executive Officer or his designee:
  - a. Bioassays shall be conducted on a sensitive fish species and an invertebrate species as

approved by the Regional Board's Executive Officer. *Pimephales promelas* (fathead minnow) and *Ceriodaphnia dubia* (water flea) are suggested test species that may be utilized. The bioassays shall be conducted in accordance with the protocol given in EPA/600/4-91/002 – Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Freshwater Organisms, 3<sup>rd</sup> Edition, and EPA/600/4-90/027F - Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters for Freshwater and Marine Organisms, 4<sup>th</sup> Edition, or subsequent editions.

- b. The bioassay test shall be performed as specified in the Monitoring and Reporting Program.
- 11. Any chronic toxicity test that exceeds 2 chronic toxicity units (TU<sub>c</sub>) or a three (3)-sample median<sup>11</sup> (consecutive samples) that exceeds 1 TU<sub>c</sub> may trigger an accelerated monitoring frequency. In addition, any acute toxicity test results showing high toxicity may trigger an accelerated monitoring frequency. High acute toxicity is defined as follows:
  - a. Less than 80% survival when acute toxicity is calculated from results of the chronic toxicity test (only for *Pimephales promelas*), or
  - b. Less than 90% survival when acute toxicity is calculated from the results of the acute toxicity test, or
  - c. Results of acute toxicity t-test for 100 percent effluent concentration that is reported as failed.
- 12. Accelerated monitoring frequency shall consist of performing three (3) toxicity tests in a six (6)week period following the first exceedence of the chronic or acute toxicity triggers.
- 13. A Toxicity Identification Evaluation (TIE) may be triggered if testing from the accelerated monitoring frequency indicate any of the following:
  - a. A chronic toxicity of 2 TU<sub>c</sub> or greater;
  - b. The three (3)-sample median exceeds 1 TU<sub>c</sub>;
  - c. Results of acute toxicity t-test for 100% effluent concentration that is reported as failed;
  - d. Less than 80% survival when acute toxicity is calculated from results of the chronic toxicity test (only for *Pimephales promelas*), or
  - e. Less than 90% survival when acute toxicity is calculated from the results of the acute toxicity test.
- 14. The TIE shall be conducted to identify and evaluate toxicity in accordance with procedures recommended by the (USEPA) which include the following:
  - a. Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, (USEPA, 1992a);
  - b. Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition (USEPA, 1991a);

<sup>&</sup>lt;sup>11</sup> 3-Sample median is defined as follows: The middle value of 3 consecutive samples arranged from the low value to the high value.

- c. Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Sampling Exhibiting Acute and Chronic Toxicity (USEPA, 1993a);
- d. Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (USEPA, 1993b);
- 15. If repeated toxicity tests reveal toxicity, the discharger may be required to conduct a Toxicity Reduction Evaluation (TRE). The discharger shall take all reasonable steps to control toxicity once the source of the toxicity is identified. A failure to conduct required toxicity tests or a TRE within a designated period shall result in the establishment of numerical effluent limitations for chronic toxicity in a permit or appropriate enforcement action. Recommended guidance in conducting a TRE include the following:
  - a. Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, August 1999, EPA/833B-99/002;
  - b. Clarifications Regarding Toxicity Reduction and Identification Evaluations in the NPDES Program dated March 27, 2001, USEPA Office of Wastewater Management, Office of Regulatory Enforcement.
- 16. The City of Calexico's Wastewater Treatment Plant shall be protected from any washout or erosion of wastes or covering material, and from any inundation, which could occur as a result of floods having a predicted frequency of once in 100 years.
- E. Provisions
  - 1. This Board Order shall serve as a NPDES Permit pursuant to Section 402 of the Federal Clean Water Act, as amended, and shall become effective at the end of ten (10) days from the date of the hearing when this Board Order was adopted by the Regional Board, provided the Regional Administrator, USEPA has no objections.
  - This Board Order expires five (5) years from date of adoption, on January 14, 2009, and the discharger shall submit an NPDES application and file a complete Report of Waste Discharge in accordance with Title 23, California Code of Regulations, at least 180 days in advance of January 14, 2009, as an application for issuance of a new Board Order.
  - The discharger shall comply with all conditions of this Board Order. Noncompliance constitutes a violation of the Federal Clean Water Act and Porter-Cologne Water Quality Control Act, and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification of WDRs; or denial of a Permit renewal application.
  - 4. The discharger shall comply with "Standard Provisions for National Pollutant Discharge Elimination System Permit" dated October 1990 (attached).
  - 5. The discharger shall comply with Monitoring and Reporting Program No. R7-2004-0009, and future revisions thereto, as specified by the Regional Board's Executive Officer.
  - 6. The discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.
  - 7. The discharger's WWTP shall be supervised and operated by persons possessing certification of

appropriate grade pursuant to Section 3680, Chapter 26, Division 3, Title 23 of the California Code of Regulations. The discharger shall ensure that all operating personnel are familiar with the contents of this Board Order.

- 8. The discharger shall, at all times, properly operate and maintain all systems and components of collection, treatment and control which are installed or used by the discharger to achieve compliance with the conditions of this Board Order. Proper operation and maintenance includes effective performance, adequate process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of this Board Order. All systems both in service and reserved, shall be inspected and maintained on a regular basis. Records shall be kept of the inspection results and maintenance performed and made available to the Regional Board upon request.
- 9. Facilities shall be available to keep the plant in operation in the event of commercial power failure.
- 10. Unless otherwise approved by the Regional Board's Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the USEPA.
- 11. The discharger shall report any noncompliance that may endanger human health or the environment. The discharger shall immediately report orally information of the noncompliance as soon as (1) the discharger has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measured, to the Regional Board office and the Office of Emergency Services. During non-business hours the discharger shall leave a message on the Regional Board office voice recorder, (760) 346-7491. A written report shall also be provided within five (5) business days of the time the discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The discharger shall report all intentional or unintentional sewage spills in excess of one thousand (1,000) gallons occurring within the facility or collection system to the Regional Board office in accordance with the above time limits.
- 12. The discharger shall provide a report to the Regional Board when it determines that the treatment plant's average dry weather flowrate for any month exceeds 80 percent of the design treatment capacity specified in Finding No. 2 above. The report should indicate what steps, if any, the discharger intends to take to provide for the expected wastewater treatment capacity necessary when the plant reaches design capacity.
- 13. The discharger shall allow the Regional Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
  - a. Enter upon the premises regulated by this Board Order, or the place where records must be kept under the conditions of this Board Order;
  - b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Board Order;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order; and

- d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.
- 14. The discharger shall comply with the following:
  - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - b. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order, for a period of at least five (5) years from the date of the sample, measurement, report or application.
  - c. Records of monitoring information shall include:
    - 1. The date, exact place, and time of sampling or measurements.
    - 2. The individual(s) who performed the sampling or measurements.
    - 3. The date(s) analyses were performed.
    - 4. The individual(s) who performed the analyses.
    - 5. The analytical techniques or methods used.
    - 6. The results of such analyses.
- 15. Prior to any change in ownership or management of this operation, the discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Board.
- 16. Prior to any modifications in this facility, which would result in material change in the quality or, quantity of wastewater treated or discharged, or any material change in the location of discharge, the discharger shall report all pertinent information in writing to the Regional Board and obtain revised requirements before any modifications are implemented.
- 17. The discharger shall provide adequate notice to the Regional Board's Executive Officer of the following:
  - a. Any new introduction of pollutants into any of the treatment facilities described in the Findings of this Board Order from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act, if it were directly discharging the pollutants.
  - b. Any substantial change in the volume or character of pollutants being introduced into any of the treatment facilities described in the Findings of this Board Order by an existing or new source.
  - c. Any planned physical alterations or additions to the facilities described in this Board Order, or changes planned in the discharger's sludge use or disposal practice, where such alterations, additions, or changes may justify the application of Board Order conditions that are different from or absent in the existing Board Order, including notification of additional disposal sites not reported during the Board Order application process, or not reported pursuant to an approved land application plan.

- 18. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.
- 19. In the event that there are storm water discharges associated with industrial activities, the discharger shall submit a Notice of Intent and/or maintain coverage under the General Storm Water Permit.
- 20. All storm water discharges from this facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies, regarding discharges of storm water to storm water drain systems or other courses under their jurisdiction.
- 21. Storm water discharges from the facility shall not cause or threaten to cause pollution or nuisance.
- 22. Storm water discharges from the facility shall not contain hazardous substances equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302.
- 23. Ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration during the non-irrigation season. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
- 24. The discharger shall provide a plan as to the method, treatment, handling and disposal of sludge that is consistent with all State and Federal laws and regulations and obtain prior written approval from the Regional Board specifying location and method of disposal, before disposing of treated or untreated sludge.
- 25. All sludge generated at the wastewater treatment plant shall be treated, applied, and/or disposed in accordance with Federal Regulations 40 CFR 503.
- 26. All screenings, sludge, and biosolids generated at the wastewater treatment plant shall be disposed of in a manner that is consistent with the State Water Resources Control Board and Integrated Waste Management Board joint regulations, Title 27 of the California Code of Regulations (CCR).
- 27. The discharger shall maintain a permanent log of all solids hauled away from the treatment facility for use/disposal elsewhere and shall provide a summary of the volume, type (screenings, grit, raw sludge, digested sludge), use (agricultural, composting, etc.), and the destination in accordance with the Monitoring and Reporting Program of this Board Order. The sludge that is stockpiled at the treatment facility shall be sampled and analyzed for those constituents listed in the sludge monitoring section of the Monitoring and Reporting Program of this Board Order and as required by Title 40, Code of Federal Regulations, Part 503. The results of the analyses should be submitted to the Regional Board as part of the Monitoring and Reporting Program.
- 28. The discharger shall submit to the Regional Board a toxicity reduction evaluation (TRE) workplan (1-2 pages) within 90 days of the effective date of this permit. This plan shall describe the steps the permittee intends to follow in the event that toxicity is detected, and should include at a minimum:
  - a. A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of toxicity, effluent variability, and treatment system efficiency;
  - b. A description of the facility's method of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility;

- c. If a toxicity identification evaluation (TIE) is necessary, who will conduct it (i.e., in-house or outside consultant).
- 29. The discharger shall, as required by the Executive Officer, conduct a Pollutant Minimization Program in accordance with the California Toxics Policy when there is evidence that the priority pollutant is present in the effluent above an effluent limitation and a sample result is reported as detected and not quantified and the effluent limitation is less than the reported minimum level; or a sample result is reported as not detected and the effluent limitation is less than the method detection limit.
- 30. The permit shall be reopened and modified or revoked and reissued as a result of the detection of a reportable priority pollutant identified by special conditions' monitoring data, included in this permit. These special conditions in the permit may be, but are not limited to, fish tissue sampling, whole effluent toxicity tests, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in the permit as a result of the special condition monitoring data.
- 31. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
- 32. This Board Order does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
- 33. This Board Order may be modified, rescinded and reissued, for cause. The filing of a request by the discharger for a Board Order modification, rescission and reissuance, or a notification of planned changes or anticipated noncompliance does not stay any Board Order condition. Causes for modification include the promulgation of new regulations, modification of land application plans, or modification in sludge use or disposal practices, or adoption of new regulations by the SWRCB or the Regional Board, including revisions to the Basin Plan.

## F. Pretreatment

- 1. In the event that the Regional Board or its Executive Officer determines that circumstances warrant pretreatment requirements in order to prevent Interference [40 CFR 403.3(j)] with the WWTP or Pass Through [40 CFR 403.3(n)], then:
  - a. The discharger shall notify the Regional Board within 30 days after there are discharges that trigger the pretreatment requirements.
  - b. The discharger shall submit a revised Report of Waste Discharge and the pretreatment program for the Regional Board's review and approval as soon as possible but not more than one (1) year after the discharger's notification to Regional Board of pretreatment requirements.
  - c. The discharger shall enforce the federal categorical pretreatment standards on all Categorical Industrial Users (CIUs).
  - d. The discharger shall notify the CIU of its discharge effluent limits. The limits must be as stringent as the pretreatment standards contained in the applicable federal category (40 CFR Part 400-699). The discharger may develop more stringent, technology based local limit if it can show cause.
  - e. The discharger shall notify the RWQCB if the CIU violates its discharge effluent limits.

- The discharger shall provide the Regional Board in an annual report describing the pretreatment program activities over the previous 12-month period. The report shall be transmitted to the Regional Board office no later than January 15<sup>th</sup> of each year and include:
  - a. A summary of actions taken by the discharger which ensures industrial-user compliance;
  - b. An updated list of industrial users (by SIC categories) which were issued permits, and/or enforcement orders, and a status of compliance for each user; and
  - c. The name and address of each user that received a revised discharge limit.
- 3. The Regional Board retains the authority to take legal action against an industrial user and/or the discharger where a user fails to meet the approved applicable pretreatment standards.

Duplicate signed copies of these reports shall be submitted to the USEPA's Regional Administrator, and the Regional Board at the following addresses:

Regional Administrator United States Environmental Protection Agency Region 9, Attn: W-3 75 Hawthorne Street San Francisco, CA 94105

California Regional Water Quality Control Board Colorado River Basin Region 73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260

I, Philip A. Gruenberg, 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 February 11, 2004.

Executive Officer