

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER NO. R5-2004-0073

NPDES NO. CA0079081

WASTE DISCHARGE REQUIREMENTS  
FOR  
CITY OF CHICO  
CHICO WATER POLLUTION CONTROL PLANT  
BUTTE COUNTY

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

1. The City of Chico (hereafter Discharger) submitted a Report of Waste Discharge, dated 21 November 2003, and applied for a permit renewal to discharge waste under the National Pollutant Discharge Elimination System (NPDES) for the Chico Water Pollution Control Plant (No. CA0079081).
2. The Discharger discharges an average dry weather flow of 6.5 million gallons per day (mgd) of treated domestic and industrial wastewater from the wastewater treatment facility into the Sacramento River, a water of the United States, at a point (Discharge 001) in Section 2, T21N, R1E, MDB&M (latitude 39° 41' 41" and longitude 121° 56' 30"), as shown on Attachment A, which is incorporated herein and made part of this Order. The facility (Assessor's Parcel Nos. 039-530-009 and 039-530-010) is owned by the Discharger.
3. The Discharger has the ability to discharge treated effluent to the M&T Canal, an irrigation ditch (Discharge 002). The average annual discharge to the canal is unknown precisely as the discharge is infrequent. Discharge to the canal is typically for emergency use and has occurred only once in the past 20 years.
4. The treatment system consists of screening for removal of large solids, grit removal, primary clarification, activated sludge treatment with secondary clarification, and chlorination/dechlorination. Sludge is treated by anaerobic digestion followed by mechanical dewatering using a centrifuge and/or solar drying and then disposed at a sanitary landfill. The Report of Waste Discharge and information from the Discharger's monitoring reports describes the discharge as follows:

Design Average Dry Weather Flow:	9.0 mgd
Average Dry Weather Flow:	6.5 mgd
Maximum Daily Wet Weather Flow:	11.8 mgd
Average Temperature:	79°F Summer; 68°F Winter

<u>Constituent</u>	<u>mg/L</u>	<u>lbs/day<sup>b</sup></u>
BOD <sup>a</sup>	4.0	217
Total Suspended Solids	4.0	217

<sup>a</sup> 5-day, 20°C biochemical oxygen demand.

<sup>b</sup> Based on an ADWF of 6.5 mgd.

5. The U.S. Environmental Protection Agency (USEPA) and the Board have classified this discharge as a major discharge.
6. The Board adopted a Water Quality Control Plan, Fourth Edition, for the Sacramento and San Joaquin River Basins (hereafter Basin Plan). The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the Basin. These requirements implement the Basin Plan.
7. The USEPA adopted the *National Toxics Rule* (NTR) on 5 February 1993 and the *California Toxics Rule* (CTR) on 18 May 2000. These Rules contain water quality standards applicable to this discharge. The State Water Resources Control Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Policy), which contains guidance on implementation of the *National Toxics Rule* and the *California Toxics Rule*.
8. The Discharger was issued a letter under the authority of California Water Code Section 13267 on 28 February 2001, requesting effluent and receiving water monitoring meeting the requirements of the State Implementation Policy (SIP). The Discharger has submitted the required monitoring.
9. The beneficial uses of the Sacramento River downstream of the discharge as identified in Table II-1 of the Basin Plan are municipal and domestic, industrial, and agricultural supply; water contact and noncontact recreation; aesthetic enjoyment; navigation; ground water recharge, fresh water replenishment; hydroelectric power generation; and preservation and enhancement of fish, wildlife and other aquatic resources.
10. The beneficial uses of the underlying ground water are municipal, domestic, industrial and agricultural supply.
11. The Discharger has conducted a mixing zone study for their discharge and developed a dilution credit of 63 at critical conditions (for acute and chronic criteria) and 117 at the average condition (for human health criteria). The mixing zone for these dilution credits is 70 feet wide by 250 feet long, downstream from the diffuser. This leaves a zone of passage in the river with a width of 100 feet. For discharge to the M&T canal, dilution credits of 7.2 for acute and chronic criteria and 9 for human health criteria were used. These dilution

credits are calculated on the basis of typical flow in the canal. No dilution is allowed during the winter when the canal is drained and not in use for irrigation.

12. Federal regulations require effluent limitations for all pollutants that are or may be discharged at a level that will cause or have a reasonable potential to cause, or contribute to an in-stream excursion above a narrative or numerical water quality standard. Based on information submitted as part of the application, in studies, and as directed by monitoring and reporting programs, the Regional Board finds that the discharge has a reasonable potential to cause or contribute to an in-stream excursion above a water quality standard for the following constituents:

**a. Copper:**

As reported by the Discharger, copper was detected in the effluent at a maximum concentration of 6.3 µg/L. The USEPA CTR aquatic life chronic criterion for copper is 4.8 µg/L (for a minimum receiving water hardness of 46 mg/L and applying the USEPA translator of 0.960). The maximum observed upstream receiving water copper concentration was 3.3 µg/L.

The detected concentration of copper exceeds the CTR criterion. Therefore, the discharge has a reasonable potential to cause or contribute to an in-stream exceedance of the CTR criterion. An effluent limitation for copper is included in this Order based on the CTR chronic toxicity criterion and is established as 81 µg/L as a monthly average and the daily maximum of 160 µg/L.

**b. Lead:**

As reported by the Discharger, lead was detected in the effluent at a maximum concentration of 1.6 µg/L. The USEPA CTR aquatic life chronic criterion for lead is 1.18 µg/L (for a minimum receiving water hardness of 46 mg/L and applying the USEPA translator of 0.904). The maximum observed upstream receiving water lead concentration was 0.68 µg/L.

The detected concentration of lead exceeds the CTR criterion. Therefore, the discharge has a reasonable potential to cause or contribute to an in-stream exceedance of the CTR criterion. An effluent limitation for lead is included in this Order based on the CTR chronic toxicity criterion and is established as 27 µg/L as a monthly average and the daily maximum of 53 µg/L.

**c. Zinc:**

As reported by the Discharger, zinc was detected in the effluent at a maximum concentration of 119 µg/L. The USEPA CTR aquatic life chronic and acute criteria for zinc is 62.1 µg/L (for a minimum receiving water hardness of 46 mg/L and

applying the USEPA translators of 0.986 for chronic and 0.978 for acute). The maximum observed upstream receiving water zinc concentration was 10 µg/L.

The detected concentration of zinc exceeds the CTR criteria. Therefore, the discharge has a reasonable potential to cause or contribute to an in-stream exceedance of the CTR criteria. An effluent limitation for zinc is included in this Order based on the CTR acute toxicity criterion and is established as 1,700 µg/L as a monthly average and the daily maximum of 3,300 µg/L.

**d. Bromodichloromethane:**

As reported by the Discharger, bromodichloromethane was detected in the effluent at a maximum concentration of 12 µg/L. The USEPA CTR human health criterion for bromodichloromethane is 0.56 µg/L (for waters that are sources of drinking water and which aquatic organisms may be consumed). The maximum observed upstream receiving water bromodichloromethane concentration was <0.05 µg/L.

The detected concentration of bromodichloromethane exceeds the CTR criterion. Therefore, the discharge has a reasonable potential to cause or contribute to an exceedance of the CTR criterion. Bromodichloromethane is a trihalomethane, which poses a serious cancer risk. An effluent limitation for bromodichloromethane is included in this Order based on the CTR human health criterion and is established as 60 µg/L as a monthly average and the daily maximum of 120 µg/L.

**e. Dibromochloromethane:**

As reported by the Discharger, dibromochloromethane was detected in the effluent at a maximum concentration of 2.6 µg/L. The USEPA CTR human health criterion for dibromochloromethane is 0.41 µg/L (for waters that are sources of drinking water and which aquatic organisms may be consumed). The maximum observed upstream receiving water dibromochloromethane concentration was <0.06 µg/L.

The detected concentration of dibromochloromethane exceeds the CTR criterion. Therefore, the discharge has a reasonable potential to cause or contribute to an exceedance of the CTR criterion. Dibromochloromethane is a trihalomethane, which poses a serious cancer risk. An effluent limitation for dibromochloromethane is included in this Order based on the CTR human health criterion and is established as 41 µg/L as a monthly average and the daily maximum of 83 µg/L.

**f. Total Chlorine Residual:**

Chlorine is commonly used as a disinfection agent in the treatment of wastewater. Proper disinfection ensures destruction of pathogens prior to discharge to the surface waters. The Discharger uses sodium hypochlorite as a chlorine source for disinfection

of the wastewater at the treatment plant. Because chlorine can cause toxicity to aquatic organisms when discharged to surface waters, a dechlorination process is necessary for the removal of chlorine. For dechlorination, the Discharger uses sodium bisulfite, which combines with chlorine, to render it relatively unreactive and thus removes it from the waste stream. Inadequate dechlorination may result in the discharge of chlorine to the receiving stream and cause toxicity to aquatic life. The Basin Plan prohibits the discharge of toxic substances in toxic concentrations.

The USEPA has developed Ambient Water Quality Criteria for the protection of freshwater aquatic life. The recommended maximum one-hour average and four-day average concentrations for chlorine are 0.02 mg/L and 0.01 mg/L, respectively. Effluent Limitations for chlorine are included in this Order and are based on the Basin Plan narrative toxicity objective.

**g. Total Suspended Solids (TSS) and Biochemical Oxygen Demand (BOD):**

Federal regulations, 40 CFR, part 133, provide technology based effluent limitation for BOD and TSS. Pursuant to the regulations at 40 CFR Sections 133.102(a), and (b), the BOD and TSS 30 day average discharge limit for secondary treatment systems shall not exceed 30 mg/L, the 7 day average shall not exceed 45 mg/L, and the 30 day BOD percent removal shall not be less than 85 percent. This permit includes monthly average effluent limits for BOD and TSS of 30 mg/L, weekly average limits of 45 mg/L, and a monthly average removal rate of 85 percent.

**h. Total Coliform Organisms:**

This Order requires a monthly median total coliform limit of 23 MPN/100 ml and a daily maximum limit of 500 MPN/100 ml for effluent discharged to the Sacramento River. This level is thought to be adequately protective of beneficial uses and is consistent with the previous permit.

**i. pH:**

The Basin Plan provides that the pH of surface waters shall not be depressed below 6.5 nor raised above 8.5 nor shall the discharge alter pH of the receiving water more than 0.5 units. Federal regulations at 40 CFR 133.102(c) describes the minimum level of effluent quality to be attained by secondary treatment facilities for pH to be within 6.0 and 9.0 units. This Order requires the pH of the effluent to be maintained within the limits of 6.0 and 9.0 pH units.

13. Section 13263.6(a), California Water Code, requires that “the regional board shall prescribe effluent limitations as part of the waste discharge requirements of a POTW for all substances that the most recent toxic chemical release data reported to the state emergency response commission pursuant to Section 313 of the Emergency Planning and Community

Right to Know Act of 1986 (42 U.S.C. Sec. 11023) (EPCRA) indicate as discharged into the POTW, for which the state board or the regional board has established numeric water quality objectives, and has determined that the discharge is or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to, an excursion above any numeric water quality objective". The Board has adopted numeric water quality objectives in the Basin Plan for the following constituents: arsenic, copper, silver, zinc, and cyanide. The most recent toxic chemical release data did not indicate that any of these constituents are discharged into the POTW. Data for arsenic, silver and cyanide indicate that there is not a reasonable potential to cause or contribute to an excursion above any numeric water quality objectives referred to in Water Code Section 13263.6(a). This Order contains effluent limitations for copper, lead and zinc.

14. California Water Code Section 13267 states, in part, "(a) A Regional Board, in establishing...waste discharge requirements... may investigate the quality of any waters of the state within its region" and "(b) (1) In conducting an investigation... the Regional Board may require that any person who... discharges... waste...that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the Regional Board requires." California Water Code Section 13383 states in part, "a regional board may establish monitoring, inspection, entry, reporting, and record keeping requirements . . . for any person who discharges pollutants . . . to navigable waters." The attached Monitoring and Reporting Program is pursuant to California Water Code Sections 13267 and 13383.
15. The permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Resources Control Board (SWRCB) Resolution 68-16. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. The impact on water quality will be insignificant.
16. Effluent limitations, and toxic and pretreatment effluent standards established pursuant to Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 304 (Information and Guidelines), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act (CWA) and amendments thereto are applicable to the discharge.
17. Federal regulations for storm water discharges were promulgated by USEPA on 16 November 1990 (40 CFR Parts 122, 123, and 124) which require specific categories of industrial facilities, which discharge storm water, to obtain NPDES permits and to implement Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to reduce or eliminate industrial storm water pollution.
18. The SWRCB adopted Order No. 97-03-DWQ (General Permit No. CAS000001), on 17 April 1997, specifying waste discharge requirements for discharge of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent (NOI) by industries to be covered under the permit. All

- stormwater drainage at the site is internal and either stored on-site or treated and discharged as part of the effluent, and therefore no stormwater notice of intent is required for the Discharger.
19. The Discharger developed a pretreatment program in conformance with 40 CFR Part 403, which was approved on 11 June 1999.
  20. The Discharger's sanitary sewer system collects wastewater using sewers, pipes, pumps, and/or other conveyance systems and directs this raw sewage to the wastewater treatment plant. A "sanitary sewer overflow" is defined as a discharge to ground or surface water from the sanitary sewer system at any point upstream of the wastewater treatment plant. Temporary storage and conveyance facilities (such as wet wells, regulated impoundments, tanks, highlines, etc.) may be part of a sanitary sewer system and discharges to these facilities are not considered sanitary sewer overflows, provided that the waste is fully contained within these temporary storage/conveyance facilities.
  21. Sanitary sewer overflows consist of varying mixtures of domestic sewage, industrial wastewater, and commercial wastewater. This mixture depends on the pattern of land use in the sewage collection system tributary to the overflow. The chief causes of sanitary sewer overflows include grease blockages, root blockages, debris blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, storm or groundwater inflow/infiltration, lack of capacity, and contractor caused blockages.
  22. Sanitary sewer overflows often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen demanding organic compounds, oil and grease, and other pollutants. Sanitary sewer overflows can cause temporary exceedances of applicable water quality objectives, pose a threat to public health, adversely affect aquatic life, and impair the public recreational use and aesthetic enjoyment of surface waters in the area.
  23. The Discharger is expected to take all necessary steps to adequately maintain and operate its sanitary sewer collection system. This Order requires the Discharger to prepare and implement a Sanitary Sewer System Operation, Maintenance, Overflow Prevention, and Response Plan.
  24. 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 21100, et seq.), requiring preparation of an environmental impact report or negative declaration in accordance with Section 13389 of the California Water Code.
  25. The Regional Board has considered the information in the attached Fact Sheet in developing the Findings of this Order. The Fact Sheet, Monitoring and Reporting Program No. R5-2004-0073, and Attachment A are a part of this Order.

26. The discharge is presently governed by Waste Discharge Requirements Order No. 99-063, adopted by the Regional Board on 11 June 1999.
27. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
28. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
29. This Order shall serve as an NPDES permit pursuant to Section 402 of the CWA, and amendments thereto, and shall take effect upon the date of hearing, provided USEPA has no objections.

IT IS HEREBY ORDERED that Order No. 99-063 is rescinded and the City of Chico, its agents, successors and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

**A. Discharge Prohibitions**

1. Discharge of treated wastewater at a location or in a manner different from that described in Finding Nos. 2, 3 and 4 is prohibited.
2. The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by Standard Provision A.13. See attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES)."
3. Neither the discharge nor its treatment shall create a nuisance as defined in Section 13050 of the California Water Code.

**B. Effluent Limitations**

1. Effluent shall not exceed the following limits at Discharge 001:

<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Median</u>	<u>4-day Average</u>	<u>Daily Maximum</u>
BOD <sup>a</sup>	mg/L	30	45	--	--	90
	lbs/day <sup>b</sup>	2,300	3,400	--	--	6,800
Total Suspended Solids	mg/L	30	45	--	--	90
	lbs/day <sup>b</sup>	2,300	3,400	--	--	6,800
Chlorine Residual	mg/L	--	--	--	0.01	0.02 <sup>c</sup>



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 BUTTE COUNTY

<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Median</u>	<u>4-day Average</u>	<u>Daily Maximum</u>
Total Recoverable	µg/L	81	--	--	--	160
Copper	lbs/day <sup>b</sup>	6.1	--	--	--	12
Total Recoverable Lead	µg/L	27	--	--	--	53
	lbs/day <sup>b</sup>	2.0	--	--	--	4.0
Total Recoverable Zinc	µg/L	1,700	--	--	--	3,300
	lbs/day <sup>b</sup>	130	--	--	--	250
Bromodichloromethane	µg/L	60	--	--	--	120
	lbs/day <sup>b</sup>	4.5	--	--	--	9.0
Dibromochloromethane	µg/L	41	--	--	--	83
	lbs/day <sup>b</sup>	3.1	--	--	--	6.2
Total Coliform Organisms	MPN/100 ml	--	--	23	--	500

<sup>a</sup> 5-day, 20°C Biochemical Oxygen Demand (BOD).

<sup>b</sup> Based upon a design treatment capacity of 9.0 mgd.

<sup>c</sup> 1-hour average

2. Effluent shall not exceed the following limits at Discharge 002 during the period from April 15 through December 15:

<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Median</u>	<u>4-day Average</u>	<u>Daily Maximum</u>
BOD <sup>a</sup>	mg/L	30	45	--	--	90
	lbs/day <sup>b</sup>	2,300	3,400	--	--	6,800
Total Suspended Solids	mg/L	30	45	--	--	90
	lbs/day <sup>b</sup>	2,300	3,400	--	--	6,800
Chlorine Residual	mg/L	--	--	--	0.01	0.02 <sup>c</sup>
Total Recoverable	µg/L	13	--	--	--	26
Copper	lbs/day <sup>b</sup>	0.98	--	--	--	2.0
Total Recoverable Lead	µg/L	3.9	--	--	--	7.8
	lbs/day <sup>b</sup>	0.29	--	--	--	0.59
Total Recoverable Zinc	µg/L	220	--	--	--	440
	lbs/day <sup>b</sup>	17	--	--	--	33
Bromodichloromethane	µg/L	5.2	--	--	--	10
	lbs/day <sup>b</sup>	0.39	--	--	--	0.75
Dibromochloromethane	µg/L	3.6	--	--	--	7.2
	lbs/day <sup>b</sup>	0.27	--	--	--	0.54

<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Median</u>	<u>4-day Average</u>	<u>Daily Maximum</u>
Total Coliform Organisms	MPN/100 ml	--	--	23	--	500

<sup>a</sup> 5-day, 20°C Biochemical Oxygen Demand (BOD).

<sup>b</sup> Based upon a design treatment capacity of 9.0 mgd.

<sup>c</sup> 1-hour average

3. Effluent shall not exceed the following limits at Discharge 002 during the period from December 16 through April 14:

<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Median</u>	<u>4-day Average</u>	<u>Daily Maximum</u>
BOD <sup>a</sup>	mg/L	30	45	--	--	90
	lbs/day <sup>b</sup>	2,300	3,400	--	--	6,800
Total Suspended Solids	mg/L	30	45	--	--	90
	lbs/day <sup>b</sup>	2,300	3,400	--	--	6,800
Chlorine Residual	mg/L	--	--	--	0.01	0.02 <sup>c</sup>
Total Recoverable Copper	µg/L	3.3	--	--	--	6.7
Total Recoverable Lead	lbs/day <sup>b</sup>	0.25	--	--	--	0.50
	µg/L	0.96	--	--	--	1.9
Total Recoverable Zinc	lbs/day <sup>b</sup>	0.072	--	--	--	0.14
	µg/L	31	--	--	--	62
Bromodichloromethane	lbs/day <sup>b</sup>	2.3	--	--	--	4.7
	µg/L	0.56	--	--	--	1.1
Dibromochloromethane	lbs/day <sup>b</sup>	0.042	--	--	--	0.083
	µg/L	0.41	--	--	--	0.82
Total Coliform Organisms	lbs/day <sup>b</sup>	0.031	--	--	--	0.062
	MPN/100 ml	--	--	23	--	500

<sup>a</sup> 5-day, 20°C Biochemical Oxygen Demand (BOD).

<sup>b</sup> Based upon a design treatment capacity of 9.0 mgd.

<sup>c</sup> 1-hour average

4. 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).
5. The discharge shall not have a pH less than 6.0 nor greater than 9.0.

6. The average dry weather (July through September) discharge flow shall not exceed 9.0 mgd.
7. Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:

Minimum for any one bioassay -----70%  
Median for any three or more consecutive bioassays -----90%

**C. Sludge Disposal**

1. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer, and consistent with *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq.
2. Any proposed change in sludge use or disposal practice from a previously approved practice shall be reported to the Executive Officer and USEPA Regional Administrator at least **90 days** in advance of the change.
3. Use and disposal of sewage sludge shall comply with existing Federal and State laws and regulations, including permitting requirements and technical standards included in 40 CFR 503. If the State Water Resources Control Board and the Regional Water Quality Control Boards are given the authority to implement regulations contained in 40 CFR 503, this Order may be reopened to incorporate appropriate time schedules and technical standards. The Discharger must comply with the standards and time schedules contained in 40 CFR 503 whether or not they have been incorporated into this Order.
4. The Discharger shall submit a sludge disposal plan describing the annual volume of sludge generated by the plant and specifying the disposal practices in accordance with the attached Monitoring and Reporting Program.

**D. Discharge Specifications Ponds**

1. Ponds shall be managed to maintain the integrity of the pond embankments and to prevent breeding of mosquitoes. Weeds shall be minimized.
2. The dissolved oxygen content of the ponds shall not be less than 1.0 mg/L for 16 hours in any 24 hour period.
3. The Discharger shall maintain a minimum 1 foot of freeboard in the ponds at all times. The ponds shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation. Design seasonal precipitation shall be based on

total annual precipitation using a return period of 25 years, distributed monthly in accordance with historical rainfall patterns.

4. The discharge to ponds shall not cause degradation of any water supply.

**E. Receiving Water Limitations**

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 Sacramento River:

1. Concentrations of dissolved oxygen to fall below 9.0 mg/L. When natural conditions lower dissolved oxygen below this level, the concentrations shall be maintained at or above 95 percent of saturation.
2. Oils, greases, waxes, or other materials to form a visible film or coating on the water surface or on the stream bottom.
3. Oils, greases, waxes, floating material (liquids, solids, foams, and scums) or suspended material to create a nuisance or adversely affect beneficial uses.
4. Chlorine to be detected in the receiving water in concentrations equal to or greater than 0.01 mg/L.
5. Aesthetically undesirable discoloration.
6. Fungi, slimes, or other objectionable growths.
7. The turbidity to increase as follows:
  - a. More than 1 Nephelometric Turbidity Units (NTUs) where natural turbidity is between 0 and 5 NTUs.
  - b. More than 20 percent where natural turbidity is between 5 and 50 NTUs.
  - c. More than 10 NTUs where natural turbidity is between 50 and 100 NTUs.
  - d. More than 10 percent where natural turbidity is greater than 100 NTUs.
8. The normal ambient pH to fall below 6.5, exceed 8.5, or change by more than 0.5 units.
9. Deposition of material that causes nuisance or adversely affects beneficial uses.

10. The normal ambient temperature to be increased more than 5°F, or to higher than 56°F when such an increase will be detrimental to the fishery, whichever is more restrictive.
11. Radionuclides to be present in concentrations that exceed maximum contaminant levels specified in the California Code of Regulations, Title 22; that harm human, plant, animal or aquatic life; or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
12. Aquatic communities and populations, including vertebrate, invertebrate, and plant species, to be degraded.
13. Toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; that produce detrimental response in human, plant, animal, or aquatic life; or that bioaccumulate in aquatic resources at levels which are harmful to human health.
14. Violations of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board pursuant to the CWA and regulations adopted thereunder.
15. Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to cause nuisance or adversely affect beneficial uses.
16. The fecal coliform concentration in any 30-day period to exceed a geometric mean of 200 MPN/100 ml or cause more than 10 percent of total samples to exceed 400 MPN/100 ml.
17. Upon adoption of any applicable water quality standard for receiving waters by the Regional Board or the State Water Resources Control Board pursuant to the CWA and regulations adopted thereunder, this permit may be reopened and receiving water limitations added.

**F. Groundwater Limitations**

1. The discharge, in combination with other sources, shall not cause groundwater underlying the wastewater disposal areas to contain waste constituents statistically greater than background water quality, except for coliform bacteria. For coliform bacteria, increases shall not cause the most probable number of total coliform organisms to exceed 2.2 MPN/100 ml over any seven-day period.

### **G. Pretreatment Program Requirements**

The Discharger shall:

1. Comply with all pretreatment requirements contained in 40 CFR Part 403 and shall be subject to enforcement actions, penalties, fines, and other remedies by USEPA or other appropriate parties, as provided in the CWA, as amended. The Discharger shall implement and enforce its approved Pretreatment Program. The USEPA may initiate enforcement action against an industrial user for noncompliance with applicable standards and requirements as provided in the CWA.
2. Enforce the requirements promulgated under Section 307(b), (c), and (d), and Section 402(b) of the CWA. The Discharger shall cause industrial users subject to federal categorical standards to achieve compliance no later than the date specified in those requirements, or in the case of a new industrial user, upon commencement of the discharge.
3. Perform the pretreatment functions required in 40 CFR Part 403, including, but not limited to:
  - a. Implementing the necessary legal authorities as provided in 40 CFR 403.8(f)(1);
  - b. Enforcing the pretreatment requirements under 40 CFR 403.5 and 403.6;
  - c. Implementing the programmatic functions as provided in 40 CFR 403.8(f)(2);
  - d. Providing the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 403.8(f)(3); and
  - e. Publishing a list of significant violators as required by 40 CFR 403.8(f)(2)(vii), where "significant violations" and "significant noncompliance" are as defined by USEPA in Pretreatment Compliance Monitoring and Enforcement Guidance, pp. 3-48 through 3-52.

### **H. Provisions**

1. The Discharger shall not allow pollutant-free wastewater to be discharged into the collection, treatment, and disposal system in amounts that significantly diminish the system's capability to comply with this Order. Pollutant-free wastewater means rainfall, ground water, cooling waters, and condensates that are essentially free of pollutants.
2. The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

3. The Discharger shall report to the Regional Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act of 1986.
4. Within **one year of the adoption date of this order**, the Discharger shall submit to the Board a Sewer System Operation, Maintenance, Overflow Prevention, and Overflow Response Plan (SSS Plan) that describes the actions designed to prevent or minimize the potential for sanitary sewer overflows. The Discharger shall amend the SSS Plan as necessary. The Discharger shall ensure that the up-to-date SSS Plan is readily available to maintenance personnel at all times and that personnel are familiar with the plan.

At a minimum, the Operation and Maintenance portion of the SSS Plan shall contain or describe the following:

- a. Plans of the sewer system, identifying sewer mains, manholes, cleanouts, any air relief valves, and any other specific critical equipment or infrastructure;
  - b. A listing of equipment and elements to be inspected, a description of inspection procedures and inspection frequency, and sample inspection forms;
  - c. A schedule for routine inspection and testing of manholes, sewer system piping, valves, and other key system components, and rehabilitation procedures to be followed in the case that such rehabilitation is necessary;
5. At a minimum, the Overflow Prevention and Response portion of the SSS Plan shall contain or describe the following:
- a. Response procedures for sanitary sewer overflows. Procedures shall minimize the volume of sewage that may enter surface waters, and minimize the adverse effects of sewer overflows on water quality and public health. Procedures shall also ensure that all overflows are properly identified, responded to and reported; and
  - b. A plan to notify the Butte County Environmental Health Department and a public notification plan, in which any posting of areas contaminated with sewage is performed at the direction of the Butte County Environmental Health Department. All parties with a reasonable potential for exposure to an overflow event shall be notified. Any spill in excess of 1,000 (one thousand) gallons to a surface water must also be immediately reported to the State of California Office of Emergency Services. Failure to report such a spill in accordance with the above laws and regulations is a misdemeanor punishable by fine and imprisonment.

6. The Discharger shall conduct the chronic toxicity testing specified in the Monitoring and Reporting Program. If the testing indicates that the discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the water quality objective for toxicity, the Discharger shall initiate a Toxicity Identification Evaluation (TIE) to identify the causes of toxicity. Upon completion of the TIE, the Discharger shall submit a workplan to conduct a Toxicity Reduction Evaluation (TRE) and, after Board evaluation, conduct the TRE. This Order will be reopened and a chronic toxicity limitation included and/or a limitation for the specific toxicant identified in the TRE included. Additionally, if a chronic toxicity water quality objective is adopted by the State Water Resources Control Board, this Order may be reopened and a limitation based on that objective included.
7. The Discharger shall use the best practicable cost-effective control technique currently available to limit mineralization to no more than a reasonable increment.
8. The Discharger shall comply with all the items of the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES)," dated February 2004, which are part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provisions."
9. The Discharger shall comply with Monitoring and Reporting Program No. R5-2004-0073, which is a part of this Order, and any revisions thereto as ordered by the Executive Officer.

When requested, the Discharger shall complete and submit Discharge Monitoring Reports to USEPA. The submittal date shall be no later than the submittal date specified in the Monitoring and Reporting Program for Discharger Self Monitoring Reports.

10. This Order expires on **1 June 2009** and the Discharger must file a Report of Waste Discharge in accordance with Title 23, CCR, not later than **180 days** in advance of such date in application for renewal of waste discharge requirements if it wishes to continue the discharge.
11. Prior to making any change in the discharge point, place of use, or purpose of use of the wastewater, the Discharger shall obtain approval of, or clearance from, the State Water Resources Control Board (Division of Water Rights).
12. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.



To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the address and telephone number of the persons responsible for contact with the Board and a statement. The statement shall comply with the signatory paragraph of Standard Provision D.6 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved in writing by the Executive Officer.

I, THOMAS R. PINKOS, 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 4 June 2004.

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THOMAS R. PINKOS, Executive Officer

Attachments

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2004-0073

NPDES NO. CA0079081

FOR  
CITY OF CHICO  
CHICO WATER POLLUTION CONTROL PLANT  
BUTTE COUNTY

This Monitoring and Reporting Program is issued pursuant to California Water Code Sections 13383 and 13267. The Discharger shall not implement any changes to this Monitoring and Reporting Program unless and until the Regional Board or Executive Officer issues a revised Monitoring and Reporting Program.

**INFLUENT MONITORING**

Samples shall be collected at approximately the same time as effluent samples and should be representative of the influent. Influent monitoring shall include at least the following:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Daily Flow	mgd	Continuous	Daily
20°C BOD <sub>5</sub>	mg/L, lbs/day	24-hour Composite	2 per month
Suspended Solids	mg/L, lbs/day	24-hour Composite	2 per month
Temperature	°F	Grab	2 per month

A 24-hour composite influent sample shall be collected annually and analyzed for total cadmium, chromium, copper, lead, nickel, silver, and zinc. The influent sample shall be collected at the same time an effluent sample is obtained for analysis of priority pollutants.

**EFFLUENT MONITORING**

Effluent samples shall be collected downstream from the last connection through which wastes can be admitted into the outfall. Effluent samples should be representative of the volume and quality of the discharge. Samples collected from the outlet structure of ponds will be considered adequately composited. Time of collection of samples shall be recorded. Effluent monitoring shall include at least the following:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Daily Flow	mgd	Continuous	Daily
Chlorine Residual	mg/L	Continuous	Continuous <sup>a</sup>
pH <sup>b</sup>	pH units	Grab	Daily
20°C BOD <sub>5</sub>	mg/L, lbs/day	24-hour Composite	Weekly
Suspended Solids	mg/L, lbs/day	24-hour Composite	Weekly
Total Coliform Organisms	MPN/100 ml	Grab	Weekly
Temperature <sup>b</sup>	°F	Grab	Weekly
Ammonia <sup>b,c</sup>	mg/L	Grab	Monthly
Total Copper	µg/L	Grab	Monthly
Total Lead	µg/L	Grab	Monthly
Mercury	µg/L	Grab	Quarterly <sup>f</sup>
Total Zinc	µg/L	Grab	Monthly
Bromodichloromethane	µg/L	Grab	Monthly
Dibromochloromethane	µg/L	Grab	Monthly
Electrical Conductivity @ 25°C	µmhos/cm	Grab	Monthly
Total Dissolved Solids	mg/L	Grab	Quarterly
Priority Pollutants	µg/L	Grab	Annually <sup>d</sup>
Acute Toxicity <sup>e</sup>	% Survival	Grab	Quarterly

<sup>a</sup> Report peak 1-hour average for each day and peak 4-day average for the month.

<sup>b</sup> Concurrent with biotoxicity monitoring.

<sup>c</sup> Report as both total and un-ionized ammonia.

<sup>d</sup> Receiving water hardness and pH shall be determined at R-1 at the same time as effluent samples are taken.

<sup>e</sup> Rainbow trout shall be used as the test species.

<sup>f</sup> This testing can be ceased following the reporting of the first four quarterly sample results after adoption of the permit, provided all samples are below the CTR Criterion of .050 µg/L.

If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the Discharger shall monitor and record data for all of the constituents listed above, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. In no event shall the Discharger be required to monitor and record data more often than twice the frequencies listed in the schedule.

### RECEIVING WATER MONITORING

All receiving water samples shall be grab samples taken from the Sacramento River (samples shall be taken in the M&T Canal when effluent is being discharged to the canal). Receiving water monitoring shall include at least the following:

<u>Station</u>	<u>Description</u>
R-1	500 feet upstream from the point of discharge
R-2	500 feet downstream from the point of discharge

<u>Constituent</u>	<u>Unit</u>	<u>Station</u>	<u>Sampling Frequency</u>
PH	pH units	R-1, R-2	Monthly
Turbidity	NTU	R-1, R-2	Monthly
Dissolved Oxygen	mg/L	R-1, R-2	Monthly
Temperature	°F (or °C)	R-1, R-2	Monthly
Priority Pollutants <sup>a</sup>	µg/L	R-1	Annually

<sup>a</sup> Receiving water hardness and pH shall be determined at R-1 at the same time. These samples shall be taken the same day as effluent samples for priority pollutants are taken.

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by Stations R-1 and R-2. Attention shall be given to the presence or absence of:

- |                                 |  |
|---------------------------------|--|
| a. Floating or suspended matter | e. Visible films, sheens or coatings       |
| b. Discoloration                | f. Fungi, slimes, or objectionable growths |
| c. Bottom deposits              | g. Potential nuisance conditions           |
| d. Aquatic life                 |  |

Notes on receiving water conditions shall be summarized in the monitoring report.

### THREE SPECIES CHRONIC TOXICITY MONITORING

Chronic toxicity screening shall be conducted annually to determine whether the effluent is contributing toxicity to the Sacramento River. The screening shall be conducted as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms*, EPA 600/4-91-002, or latest edition. Chronic toxicity samples shall be collected at the discharge of the plant prior to its entering the Sacramento River. Twenty-four-hour composite samples shall be representative of the volume and quality of the discharge. Time of collection samples shall be recorded. The screening test shall be performed on the undiluted effluent samples. Chronic toxicity screening shall include the following:

Species: Pimephales promelas, Ceriodaphnia dubia, and Selenastrum capricornutum

Frequency: Once per year.

If the results of the chronic toxicity screening indicate the waste stream may cause in-stream toxicity, the Discharger will be required to implement an effluent toxicity monitoring program in accordance with the procedures outlined in the document referenced in the above paragraph and *Technical Support Document for Water Quality-Based Toxics Control*, EPA 505/2-90-001. Appropriate deadlines for this program will be established if and when it is determined that a toxicity monitoring program is required.

### SLUDGE MONITORING

A composite sample of sludge shall be collected annually in accordance with USEPA's Publicly Owned Treatment Works (POTW) Sludge Sampling and Analysis Guidance Document, August 1989 (or most recent edition), and tested for priority pollutants.

Sampling records shall be retained for a minimum of five years. A log shall be kept of sludge quantities generated and of handling and disposal activities. The frequency of entries is discretionary; however, the log should be complete enough to serve as a basis for part of the annual report.

Annually by **30 January**, the Discharger shall submit characterization of sludge quality, including sludge percent solids and quantitative results of chemical analysis for the priority pollutants listed in 40 CFR 122 Appendix D, Tables II and III (excluding total phenols). All sludge samples shall be a composite of a minimum of twelve (12) discrete samples taken at equal time intervals over 24 hours. Suggested methods for analysis of sludge are provided in EPA publications titled *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods* and *Test Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater*. Recommended analytical holding times for sludge samples should reflect those specified in 40 CFR 136.6.3(e). Other guidance is available in EPA's *POTW Sludge Sampling and Analysis Guidance Document, August 1989*.

### PRETREATMENT PROGRAM MONITORING

The Discharger shall submit an annual report to the Board, with copies to the USEPA Regional Administrator and the State Board, describing the Discharger's pretreatment activities over the previous 12 months. In the event that the Discharger is not in compliance with any conditions or requirements of this Order, the Discharger shall include the reasons for the noncompliance and state how and when the Discharger shall comply with such conditions and requirements. This annual report shall be submitted by **28 February** and shall contain, but not be limited to, items G.1 through 10 of Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES) dated 1 March 1991.

In addition to the information required in the annual report, the Discharger shall report quarterly the information contained in G.4. (a through g) of Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES) dated 1 March 1991. The reports shall also describe progress towards compliance with audit or pretreatment compliance inspection requirements. Reports shall be submitted within **30 days of the end of each quarter**; however, information required in the fourth quarterly report may be included as part of the annual report. If none of the aforementioned conditions exist, at a minimum, a letter certifying that all industries are in compliance and no violations or changes to the pretreatment program have occurred during the quarter must be submitted.

In addition to the Regional Board, signed copies of the reports shall be submitted to the Regional Administrator and the State Board at the following addresses:

Mr. Keith Silva  
U.S. Environmental Protection Agency  
Region IX, Attn: W-5-2  
75 Hawthorne Street  
San Francisco, CA 94105

Pretreatment Program Manager  
Regulatory Section  
Division of Water Quality  
State Water Resources Control Board  
P.O. Box 944213  
Sacramento, CA 94244-2130

## REPORTING

Monitoring results shall be submitted to the Regional Board by the **first day of the second month** following sample collection. Quarterly and annual monitoring results shall be submitted by the **first day of the second month** following each calendar quarter and year, respectively. California Toxics Rule/SIP monitoring shall be submitted as soon as individual results are available, with all results submitted by the date stated above.

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly whether the discharge complies with waste discharge requirements. The highest daily maximum for the month, monthly and weekly averages, and medians, and removal efficiencies (%) for BOD and Suspended Solids, should be determined and recorded.

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the discharge monitoring report form. Such increased frequency shall be indicated on the discharge monitoring report form.

By **30 January of each year**, the Discharger shall submit a written report to the Executive Officer containing the following:

- a. The names, certificate grades, and general responsibilities of all persons employed at the WWTF (Standard Provision A.5).
- b. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.
- c. A statement certifying when the flow meter and other monitoring instruments and devices used for demonstration of compliance with this order were last calibrated, including identification of who performed the calibration (Standard Provision C.6).
- d. A statement certifying whether the current operation and maintenance manual, and contingency plan, reflect the wastewater treatment plant as currently constructed and operated, and the dates when these documents were last revised and last reviewed for adequacy.

The Discharger may also be requested to submit an annual report to the Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

All reports submitted in response to this Order shall comply with the signatory requirements of Standard Provision D.6.

The Discharger shall implement the above monitoring program on the first day of the month following effective date of this Order.

Ordered by: \_\_\_\_\_  
THOMAS R. PINKOS, Executive Officer

\_\_\_\_\_  
4 June 2004

(Date)

## INFORMATION SHEET

ORDER NO. R5-2004-0073  
NPDES NO. CA0079081  
CITY OF CHICO  
CHICO WATER POLLUTION CONTROL PLANT  
BUTTE COUNTY

### GENERAL INFORMATION

The City of Chico operates a wastewater treatment plant in Section 6, T21N, R1E, MDB&M. The treatment plant presently treats an average dry weather flow of 6.5 mgd. Treated effluent is discharged to the Sacramento River in Section 2, T21N, R1E, MDB&M (Discharge 001). The Discharger has the ability to discharge treated effluent to the M&T Canal, an irrigation ditch (Discharge 002). Discharge to the canal is typically for emergency use and has occurred only once in the past 20 years.

Liquid treatment processes at the plant include raw sewage screening for removal of large solids, grit removal, primary clarification, activated sludge treatment with secondary clarification, and chlorination/dechlorination. Sludge is treated using anaerobic digestion, mechanically dewatered and taken to a Class III landfill.

### TYPE AND QUANTITY OF WASTE DISCHARGED

The discharger treats an average dry weather flow of approximately 6.5 mgd of municipal wastewater. The waste is treated by biological treatment. The report of waste discharge describes the discharge as follows:

Design Average Dry Weather Flow: 9.0 mgd  
Average Daily Dry Weather Flow: 6.5 mgd  
Peak Day Wet Weather Flow: 11.8 mgd  
Average Temperature: 79°F Summer; 68°F Winter

<u>Constituent</u>	<u>mg/L</u>	<u>lbs/day<sup>b</sup></u>
BOD <sub>5</sub> <sup>a</sup>	4.0	217
Total Suspended Solids	4.0	217

<sup>a</sup>5-day, 20°C biochemical oxygen demand

<sup>b</sup>Based on a current average dry weather flow of 6.5 mgd

### REASONABLE POTENTIAL ANALYSIS

Federal regulations contained at 40 CFR 122.4 (d) require effluent limitations 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 numerical water quality standard. USEPA adopted the National Toxics Rule (NTR) on 5 February 1993 and the California Toxics Rule (CTR) on 18 May 2000. The NTR and CTR contain water quality standards applicable to this discharge. The State Water Resources Control Board adopted the *Policy for Implementation*



*of Toxics Standards for Inland Surface waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Policy or SIP), which contains guidance on implementation for the NTR and CTR.

The Discharger completed sampling required by the SIP and has submitted the results of this sampling. A determination was made that there is reasonable potential to cause or contribute to an in-stream excursion above the water quality standards for copper, lead, zinc, bromodichloromethane, and dibromochloromethane. Development of effluent limits for these constituents are presented below. There were a small number of effluent sample results that were discarded as not being representative of the effluent or receiving water. These were as follows: selenium detected, but not quantified at 8 µg/L; bis(2-Ethylhexyl)phthalate detected, but not quantified at 4 µg/L; and mercury of 0.074 µg/L. This order includes quarterly monitoring for mercury in the first year of the permit cycle to determine if there is a reasonable potential to cause or contribute to an in-stream excursion above the water quality standard.

## **BASIS FOR PERMIT CONDITIONS**

### **Metals Translators**

Water quality criteria and objectives for metals in the CTR and Basin Plan are presented as dissolved concentrations. Lacking site-specific data, the USEPA recommends conversion factors (translators) to translate dissolved concentrations to total concentrations. The conversion factor for copper in freshwater is 0.960 for both the acute and the chronic criteria. The conversion factors for zinc in freshwater are 0.978 for the acute and 0.986 for the chronic criteria. The conversion factor for lead is dependent on the hardness of the receiving water. For the minimum hardness observed of 46 mg/L, the conversion factor for lead is 0.904 for the chronic and acute criteria.

### **Dilution Credit and Mixing Zone Study**

The Discharger has conducted a mixing zone study for their discharge and developed a dilution credit of 63 at critical conditions (for acute and chronic criteria) and 117 at the average condition (for human health criteria). The mixing zone for these dilution credits is 70 feet wide by 250 feet long, downstream from the diffuser. This leaves a zone of passage in the river with a width of 100 feet. For discharge to the M&T canal, dilution credits of 7.2 for acute and chronic criteria and 9 for human health criteria were used. These dilution credits are calculated on the basis of typical flow in the canal of 100 cubic feet per second (cfs) minimum and an average of 125 cfs, and a maximum plant flow of 9.0 mgd. No dilution is allowed during the winter when the canal is drained and not in use for irrigation.

### **Effluent Limitations**

#### **Total Suspended Solids (TSS) and Biochemical Oxygen Demand (BOD) Limits:**

Federal regulations, 40 CFR, part 133, provide technology based effluent limitation for BOD and TSS. Pursuant to the regulations at 40 CFR Sections 133.102(a), and (b), the BOD and TSS 30-day average discharge limit for secondary treatment systems shall not exceed 30 mg/L, the 7-day average shall not exceed 45 mg/L, and the 30-day BOD percent removal shall not be less than 85 percent.

#### **Chlorine Residual:**

The Basin Plan prohibits the discharge of toxic materials in toxic concentrations. Sodium hypochlorite is used as a chlorine source for disinfection of the effluent waste stream. Chlorine can cause toxicity to aquatic organisms when discharged to surface waters. USEPA recommends, in their *Ambient Water Quality Criteria for the Protection of Fresh Water Aquatic Life*, that chlorine concentrations not exceed 0.02 mg/L as a 1-hour average and 0.01 mg/L as a 4-day average. The use of chlorine as a disinfectant in the wastewater treatment process presents a reasonable potential that it could be discharged in toxic concentrations. An effluent limitation for chlorine has been included in the Order to protect the receiving stream aquatic life beneficial uses. The effluent limitation has been established at the USEPA recommended ambient water quality criteria for chlorine. The one-hour average limitation, rather than an instantaneous or daily maximum, will be applied for compliance determinations. A one-hour average limitation allows for continuous monitoring anomalies while protecting aquatic organisms against toxicity.

#### **Total Coliform Organisms:**

This Order requires a monthly median total coliform limit of 23 MPN/100 ml and a daily maximum limit of 500 MPN/100 ml for effluent discharged to the Sacramento River. This level is thought to be adequately protective of beneficial uses and is consistent with the previous permit.

#### **pH:**

The Basin Plan provides that the pH of surface waters shall not be depressed below 6.5 nor raised above 8.5 nor shall the discharge alter pH of the receiving water more than 0.5 units. Federal regulations at 40 CFR 133.102(c) describes the minimum level of effluent quality to be attained by secondary treatment facilities for pH to be within 6.0 and 9.0 units. This Order requires the pH of the effluent to be maintained within the limits of 6.0 and 9.0 pH units.

#### **Flow Limits:**

The monthly average daily dry weather flow limit of 9.0 mgd is based on the design capacity of the treatment facility.

**Copper:**

Based on analytical results of effluent samples collected by the Discharger and the procedures presented in the SIP, the discharge has a reasonable potential to cause or contribute to an in-stream excursion above the CTR standards for copper; therefore, effluent limitations for copper are included in the Order. Effluent results submitted by the Discharger are summarized in Table IS-1.

**Table IS-1 – Total Copper Concentrations (µg/L)**

Date	WPCP Effluent	Sacramento River	River Hardness
7/23/01	ND, MDL = 0.9	ND, MDL = 0.45	46
10/30/01	3.4	1.7	48
1/28/02	4.9	3.3	63
4/8/02	4.2	3	53
7/30/02	6.3	2 DNQ	48
10/28/02	5.1	1.6	54
Average	<4.1	<2.0	52
Minimum	<0.9	<0.45	46
Maximum	6.3	3.3	63
Coefficient of Variation <sup>a</sup>	0.6	--	--

<sup>a</sup>Default C<sub>v</sub> in SIP for number of samples less than 10 is 0.6

Copper toxicity is hardness dependent. For a hardness of 46 mg/L, the CTR and Basin Plan criteria for copper are presented in Table IS-2.

**Table IS-2 – Receiving Water Criteria/Objectives for Copper**

Basis	Dissolved (µg/L)	Total Recoverable (µg/L)
CTR <sub>CCC</sub>	4.61	4.80
CTR <sub>CMC</sub>	6.47	6.74
Basin Plan	10.0	10.4

Criteria are for river hardness = 46 mg/L

The CTR Criteria and Basin Plan objective for copper were not exceeded in the Sacramento River samples analyzed over the period from July 2001 to October 2002. Following are the steps, as presented in section 1.4.B of the SIP, to calculate the effluent limits for copper for discharge 001:

Step 1: Applicable water quality criteria (C)

CTR criteria are a function of receiving water hardness and are given by the following equation for criterion continuous concentration (CCC) and criterion maximum concentration (CMC):

$$\text{CCC (chronic)} = e^{(0.8545 \cdot \ln(\text{hardness}) - 1.702)} * (0.960) \text{ as dissolved fraction}$$

$$\text{CMC (acute)} = e^{(0.9422 \cdot \ln(\text{hardness}) - 1.7)} * (0.960) \text{ as dissolved fraction}$$

Using the river hardness data for July 2001 through October 2002, the minimum hardness of 46 mg/L gives the following criteria:

$$\text{CCC} = 4.61 \text{ } \mu\text{g/L}$$

$$\text{CMC} = 6.47 \text{ } \mu\text{g/L}$$

The basin Plan objective for copper is:

$$\text{Basin Plan} = 10.0 \text{ } \mu\text{g/L}$$

Applying the translator of 0.960 for chronic and acute:

$$\text{CCC} = 4.80 \text{ } \mu\text{g/L}$$

$$\text{CMC} = 6.74 \text{ } \mu\text{g/L}$$

$$\text{Basin Plan} = 10.4 \text{ } \mu\text{g/L}$$

Step 2: Calculate the ECA

$$\text{ECA} = \text{Effluent Concentration Allowance} = C + D * (C - B)$$

Where D = dilution credit and B = background

$$D = 63$$

$$\text{ECA}_{\text{CCC}} = 4.80 + 63 * (4.80 - 3.3) = 99.3 \text{ } \mu\text{g/L}$$

$$\text{ECA}_{\text{CMC}} = 6.74 + 63 * (6.74 - 3.3) = 223 \text{ } \mu\text{g/L}$$

$$\text{ECA}_{\text{BP}} = 10.4 + 63 * (10.4 - 3.3) = 458 \text{ } \mu\text{g/L}$$

Step 3: Determine long-term average (LTA)

$$C_V = 0.6; \text{ECA multiplier}_{\text{chronic99}} = 0.527$$

$$\text{ECA multiplier}_{\text{acute}99} = 0.321$$

$$\text{LTA}_{\text{CCC}} = 52.3 \mu\text{g/L}$$

$$\text{LTA}_{\text{CMC}} = 71.6 \mu\text{g/L}$$

Using acute multiplier for Basin Plan objective;  $\text{LTA}_{\text{BP}} = 147 \mu\text{g/L}$

Step 4: Select lowest LTA

$$\text{LTA}_{\text{CCC}} = 52.3 \mu\text{g/L}$$

Step 5: Calculate water quality based effluent limits

$$C_V = 0.6; \text{AMEL multiplier}_{95} = 1.55 \text{ (n=4 for less than 4 samples per month)}$$

$$\text{MDEL multiplier}_{99} = 3.11$$

**Average Monthly Effluent Limit = 81  $\mu\text{g/L}$**

**Maximum Daily Effluent Limit = 160  $\mu\text{g/L}$**

Following are the effluent limit calculation results for copper for discharge 002:

	Summer Discharge (April to December)	Winter Discharge (December - April)
CTR chronic – dissolved	4.61	4.61
CTR acute – dissolved	6.47	6.47
Basin Plan – dissolved	10.0	10.0
CTR chronic – total	4.80	4.80
CTR acute – total	6.74	6.74
Basin Plan – total	10.4	10.4
Dilution Credit	7.2	0
ECA chronic	15.6	4.80
ECA acute	31.5	6.74
ECA Basin Plan	61.5	10.4
LTA chronic	8.2	2.5
LTA acute	10.1	2.2
LTA Basin Plan	19.7	3.3
Lowest LTA	8.2	2.2
Average Monthly Limit	13	3.3
Maximum Daily Effluent Limit	26	6.7

**Lead:**

Based on analytical results of effluent samples collected by the Discharger and the procedures presented in the SIP, the discharge has a reasonable potential to cause or contribute to an in-stream excursion above the CTR standards for lead; therefore, effluent limitations for lead are included in the Order. Effluent results submitted by the Discharger are summarized in Table IS-3.

**Table IS-3 – Total Lead Concentrations (µg/L)**

Date	WPCP Effluent	Sacramento River	River Hardness
7/23/01	ND, MDL = 0.6	ND, MDL = 0.3	46
10/30/01	0.9	0.1 DNQ	48
1/28/02	0.7	0.14 DNQ	63
4/8/02	1.6	0.13 DNQ	53
7/30/02	0.54	0.68	48
10/28/02	ND, MDL = 0.05	ND, MDL = 0.05	54
Average	<0.7	<0.2	52
Minimum	<0.05	<0.05	46
Maximum	1.6	0.68	63
Coefficient of Variation <sup>a</sup>	0.6	--	--

<sup>a</sup>Default C<sub>v</sub> in SIP for number of samples less than 10 is 0.6

Lead toxicity is hardness dependent. For a hardness of 46 mg/L, the CTR criteria for lead are presented in Table IS-4.

**Table IS-4 – Receiving Water Criteria for Lead**

Basis	Dissolved (µg/L)	Total Recoverable (µg/L)
CTR <sub>CCC</sub>	1.07	1.18
CTR <sub>CMC</sub>	27.5	30.4

Criteria are for river hardness = 46 mg/L

The CTR Criteria for lead were not exceeded in the Sacramento River samples analyzed over the period from July 2001 to October 2002. Following are the steps, as presented in section 1.4.B of the SIP, to calculate the effluent limits for lead at discharge 001:

Step 1: Applicable water quality criteria (C)

CTR criteria are a function of receiving water hardness and are given by the following equation for criterion continuous concentration (CCC) and criterion maximum concentration (CMC):

CCC (chronic) =  $e^{(1.273 \cdot \ln(\text{hardness}) - 4.705)} * (1.46203 - \ln(\text{hardness}) * 0.145712)$  as dissolved fraction.

CMC (chronic) =  $e^{(1.273 \cdot \ln(\text{hardness}) - 1.46)} * (1.46203 - \ln(\text{hardness}) * 0.145712)$  as dissolved fraction.

Using the river hardness data for July 2001 through October 2002, the minimum hardness of 46 mg/L gives the following criteria:

$$\text{CCC} = 1.07 \text{ } \mu\text{g/L}$$

$$\text{CMC} = 27.5 \text{ } \mu\text{g/L}$$

Applying the translator of 0.904 for chronic and acute:

$$\text{CCC} = 1.18 \text{ } \mu\text{g/L}$$

$$\text{CMC} = 30.4 \text{ } \mu\text{g/L}$$

Step 2: Calculate the ECA

$$\text{ECA} = \text{Effluent Concentration Allowance} = C + D \cdot (C - B)$$

Where D = dilution credit and B = background

$$D = 63$$

$$\text{ECA}_{\text{CCC}} = 1.18 + 63 * (1.18 - 0.68) = 32.7 \text{ } \mu\text{g/L}$$

$$\text{ECA}_{\text{CMC}} = 30.4 + 63 * (30.4 - 0.68) = 1,900 \text{ } \mu\text{g/L}$$

Step 3: Determine long-term average (LTA)

$$C_v = 0.6; \text{ECA multiplier}_{\text{chronic99}} = 0.527$$

$$\text{ECA multiplier}_{\text{acute99}} = 0.321$$

$$\text{LTA}_{\text{CCC}} = 17.2 \text{ } \mu\text{g/L}$$

$$\text{LTA}_{\text{CMC}} = 610 \text{ } \mu\text{g/L}$$

Step 4: Select lowest LTA

$$\text{LTA}_{\text{CCC}} = 17.2 \text{ } \mu\text{g/L}$$

Step 5: Calculate water quality based effluent limits

$C_v = 0.6$ ; AMEL multiplier<sub>95</sub> = 1.55 (n=4 for less than 4 samples per month)

MDEL multiplier<sub>99</sub> = 3.11

**Average Monthly Effluent Limit = 27 µg/L**

**Maximum Daily Effluent Limit = 53 µg/L**

Following are the effluent limit calculation results for lead at discharge 002:

	Summer Discharge (April to December)	Winter Discharge (December - April)
CTR chronic – dissolved	1.07	1.07
CTR acute – dissolved	27.5	27.5
CTR chronic – total	1.18	1.18
CTR acute – total	30.4	30.4
Dilution Credit	7.2	0
ECA chronic	4.78	1.18
ECA acute	244	30.4
LTA chronic	2.52	0.62
LTA acute	78.3	9.76
Lowest LTA	2.52	0.62
Average Monthly Limit	3.9	0.96
Maximum Daily Effluent Limit	7.8	1.9

**Zinc:**

Based on analytical results of effluent samples collected by the Discharger and the procedures presented in the SIP, the discharge has a reasonable potential to cause or contribute to an in-stream excursion above the CTR standards for zinc; therefore, effluent limitations for zinc are included in the Order. Effluent results submitted by the Discharger are summarized in Table IS-5.

**Table IS-5 – Total Zinc Concentrations (µg/L)**

Date	WPCP Effluent	Sacramento River	River Hardness
7/23/01	32 DNQ	3 DNQ	46
10/30/01	68	4.1	48
1/28/02	60	9	63
4/8/02	119	10	53
7/30/02	41	ND, MDL =9	48
10/28/02	49	ND, MDL =9	54



**Table IS-5 – Total Zinc Concentrations (µg/L)**

Date	WPCP Effluent	Sacramento River	River Hardness
Average	61.5	<7.4	52
Minimum	32	<3	46
Maximum	119	10	63
Coefficient of Variation <sup>a</sup>	0.6	--	--

<sup>a</sup>Default C<sub>v</sub> in SIP for number of samples less than 10 is 0.6

Zinc toxicity is hardness dependent. For a hardness of 46 mg/L, the CTR and Basin Plan criteria for zinc are presented in Table IS-6.

**Table IS-6 – Receiving Water Criteria/Objectives for Zinc**

Basis	Dissolved (µg/L)	Total Recoverable (µg/L)
CTR <sub>CCC</sub>	61.2	62.1
CTR <sub>CMC</sub>	60.7	62.1
Basin Plan	100	102

Criteria are for river hardness = 46 mg/L

The CTR Criteria and Basin Plan objective for zinc were not exceeded in the Sacramento River samples analyzed over the period from July 2001 to October 2002. Following are the steps, as presented in section 1.4.B of the SIP, to calculate the effluent limits for zinc at discharge 001:

Step 1: Applicable water quality criteria (C)

CTR criteria are a function of receiving water hardness and are given by the following equation for criterion continuous concentration (CCC) and criterion maximum concentration (CMC):

$$CCC \text{ (chronic)} = e^{(0.8473 \cdot \ln(\text{hardness}) + 0.884)} * (0.986) \text{ as dissolved fraction}$$

$$CMC \text{ (acute)} = e^{(0.8473 \cdot \ln(\text{hardness}) + 0.884)} * (0.978) \text{ as dissolved fraction}$$

Using the river hardness data for July 2001 through October 2002, the minimum hardness of 46 mg/L gives the following criteria:

$$CCC = 61.2 \text{ µg/L}$$

$$CMC = 60.7 \text{ µg/L}$$

The basin Plan objective for zinc is 100 µg/L

Applying the translator of 0.986 for chronic and 0.978 for acute:

$$CCC = 62.1 \mu\text{g/L}$$

$$CMC = 62.1 \mu\text{g/L}$$

$$\text{Basin Plan} = 102 \mu\text{g/L}$$

Step 2: Calculate the ECA

$$\text{ECA} = \text{Effluent Concentration Allowance} = C + D*(C-B)$$

Where D = dilution credit and B = background

$$D = 63$$

$$\text{ECA}_{CCC} = 62.1 + 63 * (62.1-10) = 3,340 \mu\text{g/L}$$

$$\text{ECA}_{CMC} = 62.1 + 63 * (62.1-10) = 3,340 \mu\text{g/L}$$

$$\text{ECA}_{BP} = 102 + 63 * (102-10) = 5,900 \mu\text{g/L}$$

Step 3: Determine long-term average (LTA)

$$C_V = 0.6; \text{ECA multiplier}_{\text{chronic}99} = 0.527$$

$$\text{ECA multiplier}_{\text{acute}99} = 0.321$$

$$\text{LTA}_{CCC} = 1,760 \mu\text{g/L}$$

$$\text{LTA}_{CMC} = 1,070 \mu\text{g/L}$$

$$\text{Using acute multiplier for Basin Plan objective; } \text{LTA}_{BP} = 1,890 \mu\text{g/L}$$

Step 4: Select lowest LTA

$$\text{LTA}_{CMC} = 1,070 \mu\text{g/L}$$

Step 5: Calculate water quality based effluent limits

$$C_V = 0.6; \text{AMEL multiplier}_{95} = 1.55 \text{ (n=4 for less than 4 samples per month)}$$

$$\text{MDEL multiplier}_{99} = 3.11$$

**Average Monthly Effluent Limit = 1,700 µg/L**

**Maximum Daily Effluent Limit = 3,300 µg/L**

Following are the effluent limit calculation results for zinc at discharge 002:

	Summer Discharge (April to December)	Winter Discharge (December - April)
CTR chronic – dissolved	61.2	61.2
CTR acute – dissolved	60.7	60.7
Basin Plan – dissolved	100	100
CTR chronic – total	62.1	62.1
CTR acute – total	62.1	62.1
Basin Plan – total	102	102
Dilution Credit	7.2	0
ECA chronic	437	62.1
ECA acute	437	62.1
ECA Basin Plan	764	102
LTA chronic	230	62.1
LTA acute	140	32.7
LTA Basin Plan	245	19.9
Lowest LTA	140	32.7
Average Monthly Limit	220	31
Maximum Daily Effluent Limit	440	62

**Bromodichloromethane:**

Based on analytical results of effluent samples collected by the Discharger and the procedures presented in the SIP, the discharge has a reasonable potential to cause or contribute to an in-stream excursion above the CTR human health criterion for bromodichloromethane; therefore, effluent limitations for bromodichloromethane are included in the Order. Effluent results submitted by the Discharger are summarized in Table IS-7. The CTR human health criterion for bromodichloromethane is 0.56 µg/L.

**Table IS-7 – Bromodichloromethane Concentrations (µg/L)**

Date	WPCP Effluent	Sacramento River
7/23/01	8	ND, MDL = 0.5
10/30/01	6	ND, MDL = 0.5
1/28/02	3	ND, MDL = 0.5
4/8/02	10	ND, MDL = 0.5
7/30/02	7.1	ND, MDL = 0.5
10/28/02	12	ND, MDL = 0.05
Average	7.7	<0.4
Minimum	3.0	<0.05
Maximum	12.0	<0.5
Coefficient of Variation <sup>a</sup>	0.6	--

<sup>a</sup>Default C<sub>v</sub> in SIP for number of samples less than 10 is 0.6

The CTR criterion for bromodichloromethane was not exceeded in the Sacramento River samples analyzed over the period from July 2001 to October 2002. Dilution credits will be allowed as presented in the SIP. Following are the steps, as presented in section 1.4.B of the SIP, to calculate the effluent limits for bromodichloromethane at discharge 001:

Step 1: Applicable water quality criteria (C)

CTR human health criteria for consumption of water and organisms:

$$C = 0.56 \text{ } \mu\text{g/L}$$

Step 2: Calculate the ECA

$$\text{ECA} = \text{Effluent Concentration Allowance} = C + D(C-B)$$

Where D = dilution credit and B = background

$$D = 117$$

$$\text{ECA} = 0.56 + 117 * (0.56 - 0.05) = 60.2 \text{ } \mu\text{g/L}$$

Step 3: N/A

Step 4: N/A

Step 5: Calculate water quality based effluent limits

$$\text{AMEL} = \text{ECA}$$

**Average Monthly Effluent Limit = 60 µg/L**

$C_V = 0.6$ ; MDEL<sub>99</sub>/AMEL<sub>95</sub> multiplier = 2.01 (n=4 for less than 4 samples per month)

**Maximum Daily Effluent Limit = 120 µg/L**

Following are the effluent limit calculation results for bromodichloromethane at discharge 002:

	Summer Discharge (April to December)	Winter Discharge (December - April)
CTR human health	0.56	0.56
Dilution Credit	9	0
ECA/LTA	5.15	0.56
Average Monthly Limit	5.2	0.56
Maximum Daily Effluent Limit	10	1.1

**Dibromochloromethane:**

Based on analytical results of effluent samples collected by the Discharger and the procedures presented in the SIP, the discharge has a reasonable potential to cause or contribute to an in-stream excursion above the CTR human health criterion for dibromochloromethane; therefore, effluent limitations for dibromochloromethane are included in the Order. Effluent results submitted by the Discharger are summarized in Table IS-8. The CTR human health criterion for dibromochloromethane is 0.41 µg/L.

**Table IS-8 – Dibromochloromethane Concentrations (µg/L)**

Date	WPCP Effluent	Sacramento River
7/23/01	1	ND, MDL = 0.5
10/30/01	2	ND, MDL = 0.5
1/28/02	ND, MDL = 0.5	ND, MDL = 0.5
4/8/02	2	ND, MDL = 0.5
7/30/02	0.81 DNQ	ND, MDL = 0.5
10/28/02	2.6	ND, MDL = 0.06
Average	<1.5	<0.4
Minimum	<0.5	<0.06
Maximum	2.6	<0.5
Coefficient of Variation <sup>a</sup>	0.6	--

<sup>a</sup>Default  $C_V$  in SIP for number of samples less than 10 is 0.6

The CTR criterion for dibromochloromethane was not exceeded in the Sacramento River samples analyzed over the period from July 2001 to August 2002. Dilution credits will be allowed as

presented in the SIP. Following are the steps, as presented in section 1.4.B of the SIP, to calculate the effluent limits for dibromochloromethane at discharge 001:

Step 1: Applicable water quality criteria (C)

CTR human health criteria for consumption of water and organisms:

$$C = 0.41 \text{ } \mu\text{g/L}$$

Step 2: Calculate the ECA

$$\text{ECA} = \text{Effluent Concentration Allowance} = C + D(C-B)$$

Where D = dilution credit and B = background

$$D = 117$$

$$\text{ECA} = 0.41 + 117 * (0.41 - 0.06) = 41.4 \text{ } \mu\text{g/L}$$

Step 3: N/A

Step 4: N/A

Step 5: Calculate water quality based effluent limits

$$\text{AMEL} = \text{ECA}$$

$$\text{Average Monthly Effluent Limit} = 41 \text{ } \mu\text{g/L}$$

$$C_V = 0.6; \text{MDEL}_{99}/\text{AMEL}_{95} \text{ multiplier} = 2.01 \text{ (n=4 for less than 4 samples per month)}$$

$$\text{Maximum Daily Effluent Limit} = 83 \text{ } \mu\text{g/L}$$

Following are the effluent limit calculation results for dibromochloromethane at discharge 002:

	Summer Discharge (April to December)	Winter Discharge (December - April)
CTR human health	0.41	0.41
Dilution Credit	7.2	0
ECA/LTA	3.56	0.41
Average Monthly Limit	3.6	0.41
Maximum Daily Effluent Limit	7.2	0.82

**Toxicity Limits:**

The Basin Plan requires that all waters be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This Order contains an acute toxicity effluent limit which states, "Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:

Minimum for any one bioassay -----70%  
Median for any three or more consecutive bioassays -----90%"

The monitoring and reporting program requires analysis for pH and temperature to be performed concurrent to each monthly acute toxicity bioassay. This Order also contains annual monitoring for chronic toxicity.

**SLUDGE DISPOSAL**

This Order contains provisions requiring the Discharger to comply with current federal and state laws and regulations for disposal of sewage sludge. The Discharger is required to report any proposed change in sludge use or disposal practice **90 days** in advance of change.

**RECEIVING WATER LIMITATIONS**

The receiving water limitations contained in this Order are based on water quality objectives contained in the Basin Plan for the Sacramento River.

**PROCEDURES ON REACHING FINAL DECISION ON DRAFT PERMIT**

The tentative waste discharge requirements have been sent to the Discharger and interested parties for review (at least 30 days) prior to formal presentation to the Regional Board. Any contested items on the permit will be heard and considered for change prior to formal adoption at the Board Meeting.

**FOR FURTHER INFORMATION**

For further information or questions regarding the NPDES permit, contact Nolan Randall at the Regional Water Quality Control Board in Redding at (530) 224-4801.

