

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

STAFF REPORT FOR THE REGULAR MEETING OF MAY 14, 2004

Final Draft Prepared on April 6, 2004

ITEM: 44

SUBJECT: **Renewal of National Pollutant Discharge Elimination System Permit/Waste Discharge Requirements for the City of El Paso de Robles; Templeton Community Services District; and the California Youth Authority, El Paso De Robles Boys School; San Luis Obispo County - Order No. R3-2004-0031, NPDES No. CA0047953.**

KEY INFORMATION

Location: 3200 Sulphur Springs Road, El Paso de Robles, San Luis Obispo County
Type of Waste: Municipal wastewater
Design Capacity: 4.9 mgd (dry weather, design, daily flow)
Present Volume: 2.82 mgd (average daily flow)
Treatment: Secondary (trickling filters), clarification, chlorine disinfection
Disposal: Discharge to a series of six ponds, which overflow to the adjacent to the Salinas River
Reclamation: None
Existing Order: Order No. 98-42, NPDES No. CA0047953

SUMMARY

The NPDES Permit for the City of El Paso de Robles (Discharger) expired on July 10, 2003. Proposed Waste Discharge Requirements Order No. R3-2004-0031 renews this permit. The discharge retains essentially the same character and flowrate as that regulated by the existing Waste Discharge Requirements (Order No. 98-42).

Changes to Order. Significant changes to Waste Discharge Requirements and to the City's Monitoring and Reporting Program, proposed by the Order include the following.

- Additional discharge prohibitions have been included in the permit. These permit provisions prohibit: the creation of a condition of pollution, contamination, or nuisance; adverse effects to beneficial uses of receiving waters caused by the discharge; and the discharge of radioactive substances.
- Interim effluent limitations for copper, selenium, cyanide, bromoform, chlorodibromomethane, and dichlorobromomethane are included in the

permit and become effective immediately upon adoption of Order No. R3-2004-0031.

- A study of procedures for sampling and analysis of the California Toxics Rule (CTR) pollutants is required to eliminate possible sample contamination by bis (2-ethylhexyl)phthalate. If testing, following completion of the study, continues to show measurable concentrations of this pollutant, interim discharge limitations for bis(2-ethylhexyl)phthalate will become effective.
- For each pollutant with interim effluent limitations, Order No. R3-2004-0031 establishes a compliance schedule that requires pollutant source identification, preparation and implementation of a Source Control Plan or a Pollutant Minimization Plan, and evaluation and implementation of operational measures and/or treatment upgrades to control the pollutant. Final effluent limitations become effective at the end of each compliance schedule.
- Levels of effluent toxicity are defined, which, if present, will trigger a requirement to retest and,

in some circumstances, will trigger a requirement to perform a Toxicity Reduction Evaluation (TRE).

- This Order requires that the Discharger implement the recommendations of its Salt Management Study, which was prepared for the City by Carrollo Engineers in February 2001. The City is required to conduct audits to identify large water softening operations and other potential sources of salt in wastewater influent; to characterize the salt contributions from different portions of the collection system; to require implementation of salt management plans by significant dischargers; to establish numeric; salt concentration goals for wastewater influent; and to reevaluate salt control strategies.
- Although receiving water limitations are generally retained from the previous Permit, they are supplemented and modified to more closely reflect the applicable water quality objectives of *The Water Quality Control Plan, Central Coastal Basin* (the Basin Plan). Receiving water limitations now restrict the discharge from containing pollutants at concentrations in excess of the maximum contaminant levels for inorganic and organic chemicals specified in Title 22 of the California Code of Regulations and/or in excess of the applicable criteria for toxic pollutants established by the CTR at 40 CFR 131.38.
- This Order changes sampling frequency for total dissolved solids, sodium, chloride, and sulfate from quarterly to monthly and requires analysis of effluent rather than influent samples for these parameters.
- Influent monitoring for BOD₅ and suspended solids is changed from one time every fifteen days to weekly and is now required to coincide with effluent monitoring for those parameters to allow routine calculation of removal efficiencies.
- Acute and chronic toxicity monitoring of effluent samples is required by this Order; and quarterly monitoring is required for those toxic pollutants that have effluent limitations established by this Order.
- The proposed Monitoring and Reporting Program includes detailed requirements for monitoring of the CTR and the Title 22

pollutants. Monitoring for these pollutants will be required one time during the lifetime of the Permit on effluent and receiving water samples in accordance with specific analytical procedures included in this Order.

DISCUSSION

This Discussion generally follows the format of the proposed Waste Discharge Requirements Order No. R3-2004-0031, first summarizing important findings of the Order, then addressing Discharge Prohibitions, Effluent Limitations, Effluent Toxicity Provisions, Receiving Water Limitations, and the General Provisions of the Order. Changes in the City's monitoring and reporting requirements are also addressed in this Discussion.

FINDINGS

Design and treatment capacity. The treatment process includes preliminary treatment with ferric chloride for odor control, screening, and aerated grit chambers; two primary clarifiers; secondary treatment with two plastic media and two rock media trickling filters; four secondary clarifiers; and chlorination. The average dry weather design flow capacity of the WWTP is 4.9 million gallons per day (mgd), and the current average flow is approximately 2.8 mgd. Primary and secondary sludges are anaerobically digested and dried on sludge drying beds before disposal at the City-owned landfill. Screenings are taken to a local landfill.

Discharge type and disposal. Chlorinated final effluent is conveyed through Outfall A to a series of six ponds adjacent to the Salinas River. Overflow from Pond No. 6 is typically discharged to the river through Outfall B. During pond maintenance, discharge to the river can also occur from Pond No. 3 through Outfall C.

Treatment Performance. The WWTP produces a consistently high quality secondary effluent. From 2000 through 2002, effluent consistently met discharge limitations for BOD₅ and suspended and settleable solids and was generally within the pH range of 6.5 to 8.3. Removal efficiencies for

BOD₅ and suspended solids were very good - typically greater than 90 percent. And, in this period, total coliform counts did not exceed permit limitations, although one very high count in September 2002 was attributed to laboratory error. Available acute toxicity testing data has consistently shown 100 percent survival of test species in samples of 100 percent effluent.

Quarterly monitoring of wastewater influent and effluent from 2000 through 2002 indicates significant fluctuation in salt levels, however, the trend is towards more consistent concentrations in effluent. Since the fourth quarter of 2000, TDS concentrations have ranged from 930 to 1,000 mg/L and averaged 980 mg/L; sodium concentrations have ranged from 210 to 240 mg/L and averaged 220 mg/L; chloride concentrations have ranged from 260 to 340 mg/L and averaged 300 mg/L; and sulfate concentrations have ranged from 120 to 180 mg/L and averaged 140 mg/L. There were no violations of concentration-based limitations for salts in 2002; however, effluent concentrations of salts continue to be close to their corresponding effluent limitations.

Salt Management Study. In February 2001, the Discharger completed a Salt Management Study to investigate alternatives to reduce salt loadings to the WWTP. The Study included the following immediate recommendations.

- Conduct audits of commercial and industrial dischargers to identify large water softening operations and other potential sources of salt contributions to wastewater.
- Initiate wastewater monitoring to characterize the relative salt contributions from residential, industrial, and commercial sectors, and specifically from the Templeton collection system, the California Youth Authority, and from the potentially significant dischargers identified during audits.
- Require development and implementation of Salt Management Plans by industrial and commercial facilities identified as potentially significant dischargers.
- Establish numeric concentration goals for TDS, sodium, sulfate, and chloride in WWTP influent.

- Reevaluate control strategies after influent concentration goals have been established and after monitoring has provided characterization of salt contributions from the various types of contributors and from specifically identified significant contributors.

Recycled Water Study. In February 2001, the Discharger completed a Recycled Water Study, which examined options and feasibility for wastewater reuse and alternatives to discharging to the Salinas River as the means for ultimate wastewater disposal. The Study concluded that, in light of high projected costs for reuse and alternative disposal methods, the circumstances do not exist for the City of El Paso de Robles to move forward with a reuse project. However, the City proposes to revisit those conclusions to again explore the feasibility of agricultural or urban landscape irrigation and percolation disposal in areas away from the river.

Basin Plan. The Basin Plan was adopted by the Regional Board on November 17, 1989 and amended in 1994. The Basin Plan describes the various beneficial uses of the waters of the Central Coast Region and the water quality objectives necessary to allow those uses; it describes the programs, projects, and other actions necessary to maintain or achieve the objectives and uses; it summarizes State Water Resources Control Board (State Water Board) and Regional Board plans and policies to protect water quality; and it describes statewide and regional, water quality surveillance and monitoring programs.

Beneficial Uses. Table 2-1 of the Basin Plan identifies the following present and potential beneficial uses for the Salinas River between the Nacimiento and the Santa Margarita reservoirs: municipal and domestic supply; agricultural supply; industrial process supply; ground water recharge; water contact recreation; non-contact water recreation; wildlife habitat; cold fresh water habitat; warm fresh water habitat; migration of aquatic organisms; spawning; reproduction; and/or early development; rare, threatened, or endangered species; and commercial and sport fishing.

Water Quality Objectives and Criteria. The National Toxics Rule (NTR) establishes water quality criteria for toxic pollutants applicable to the Discharger at 40 CFR Part 131. Water quality criteria of the NTR have been supplemented by criteria of the CTR at 40 CFR 131.38. And, the Basin Plan contains narrative and numeric water quality objectives, which are also applicable to the Discharger. The Basin Plan's narrative water quality objective for toxicity states, in part:

“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 aquatic life. Use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration will determine compliance with this objective, or other appropriate methods as specified by the Regional Board. ... In addition, effluent limits based upon acute bioassays of effluents will be prescribed where appropriate, additional numeric receiving water objectives for specific toxicants will be established as sufficient data become available, and source control of toxic substances is encouraged.”

For receiving waters with the beneficial use designation of municipal and domestic water supply, the Basin Plan establishes the primary drinking water maximum contaminant levels (MCLs), listed at Title 22 of the California Code of Regulations, Sections 64431 (inorganic compounds) and 64444 (organic compounds), as applicable water quality objectives.

Reasonable Potential Analysis. The U.S. EPA at 40 CFR 122.44(d)(1)(i) requires achievement of applicable water quality criteria and objectives for toxic pollutants through the establishment of effluent limitations for all pollutants “which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality.”

On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards*

for Inland Surface Waters, Enclosed Bays, and Estuaries of California (the State Implementation Policy or SIP). The SIP applies to discharges of toxic pollutants into inland surface waters, enclosed bays, and estuaries of California subject to regulation under the Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code) and the CWA. The SIP establishes procedures (1) for implementing water quality criteria of the NTR and the CTR and water quality objectives established by the basin plans of the regional water boards, (2) for monitoring 2,3,7,8 TCDD equivalents, and (3) for control of chronic toxicity.

Under Section 1.3 of the SIP, there are three triggers in determining reasonable potential.

- a. The first trigger is reached when the observed, maximum effluent concentration (MEC) is greater than the lowest applicable water quality objective or criterion (C).
- b. The second trigger is reached if the observed background concentration (B) is greater than C, and the MEC is less than C.
- c. The third trigger is activated after a review of other information determines that a water quality based effluent limitation is required to protect beneficial uses even though both MEC and B are less than C

Effluent Limitations and Compliance Schedules. The Discharger has provided analytical results for all CTR and Basin Plan toxic pollutants from effluent samples collected on February 28, June 26, and October 16, 2002. These toxic pollutant data have been evaluated to determine reasonable potential and the need for effluent limitations. For toxic pollutants that show a reasonable potential, water quality based effluent limitations (WQBELs) have been established in accordance with Section 1.4 of the SIP.

Under the first trigger in determining reasonable potential, copper, selenium, cyanide, bromoform, chlorodibromomethane, dichlorobromomethane, and bis(2-ethylhexyl)phthalate have shown reasonable potential; and therefore, WQBELs have been established for these pollutants in the Order. The Discharger has demonstrated that immediate

compliance with final limitations is infeasible and requested interim limitations and compliance schedules. In these circumstances, the SIP requires interim numeric effluent limitations based on current treatment facility performance or previous permit limitations, whichever is more stringent.

With the exception of bis(2-ethylhexyl)phthalate, the Order establishes interim effluent limitations that are immediately effective following adoption of the Order and compliance schedules for meeting final effluent limitations that will become effective in five years following adoption of the Order.

Because bis(2-ethylhexyl)phthalate was detected at relatively low concentrations, and because it is a common contaminant of sample containers, sampling apparatus, and analytical equipment, the Board is not establishing WQBELs for this pollutant at the time this Order becomes effective.

Instead, the Discharger is required to complete a study of procedures for sampling and analysis of the CTR pollutants and then take the steps necessary to assure that samples collected in the future will not be contaminated with bis(2-ethylhexyl)phthalate. If subsequent monitoring shows that the source of bis(2-ethylhexyl)phthalate has been eliminated, effluent limitations will not become effective. If bis(2-ethylhexyl)phthalate is still quantifiable, an interim effluent limitation, a compliance schedule, and final effluent limitations will become effective.

Compliance schedules include actions required of the Discharger as well as completion dates for each action step. In general, compliance schedules require source identification, preparation and implementation of source control plans, and evaluation and implementation of alternative operational measures and/or treatment upgrades.

The receiving water is fresh water, and, therefore, fresh water aquatic life criteria were considered in the reasonable potential analysis. Some CTR criteria are hardness dependant; and to determine reasonable potential, hardness of 375 mg/L was used as a background hardness level within the Salinas River. This hardness level is based on data of the Board's Central Coast Ambient Monitoring

Program as presented at www.ccamp.org from sample stations at 13th Street in El Paso de Robles and at the Highway 41 Bridge.

California 303(d) List. Section 303 (d) of the Clean Water Act requires states to identify waters for which implementation of technology-based effluent limitations have not been stringent enough to attain water quality standards for those waters. On July 25, 2003 the U.S. EPA approved the State's updated list of 303 (d) impaired waters, which lists the upper Salinas River as impaired for sodium and chloride. If total maximum daily loads (TMDLs) are developed by the Regional Board to attain water quality standards for the impairing pollutants, the Order may be updated at that time to reflect requirements of the TMDLs for sodium and chloride.

CEQA. The adoption of an NPDES permit for this discharge is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) in accordance with Section 13389 of the California Water Code.

Stormwater. U.S. EPA regulations pertaining to storm water discharges at 40 CFR Parts 122 and 123 require specific categories of industrial activities to obtain an NPDES permit and to implement Best Management Practices to control pollutants in storm water discharges. As the design flow of the Discharger's facility is 0.27 mgd, the Discharger is exempt from storm water permitting requirements.

California Water Code (CWC) § 13263.6 (a). This section of the CWC requires the Regional Board to prescribe effluent limitations, as part of the waste discharge requirements of a Publicly Owned Treatment Works (POTW), for all substances that chemical release data, as reported to the State Emergency Response Commission pursuant to Section 313 of the Emergency Planning and Community Right to Know Act of 1986 (EPCRA), indicate as discharged into the POTW, and for which the State or Regional Board has established numeric water quality objectives.

For all pollutants with numeric water quality objectives established by the State or Regional Boards, a reasonable potential analysis has been performed, and effluent limitations have been prescribed, thus maintaining compliance with CWC § 13263.6 (a).

Anti-backsliding. The removals of effluent limitations for specific toxic pollutants and for acute and chronic toxicity by this Order represent allowable exceptions to the anti-backsliding provisions of the Clean Water Act, as these modifications are based on new water quality criteria and new procedures in the SIP for applying the criteria/objectives and for determining reasonable potential.

Discharge Prohibitions

A regional board, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted. (California Water Code Section 13243)

A.1 (discharge from other location prohibited)

This prohibition is retained from the previous Permit, and is based on the Clean Water Act and implementing regulations, which require an NPDES permit for the discharge of pollutants from any discrete location.

A.2 (discharge of waste not specifically regulated is prohibited)

This prohibition is retained from the previous Permit. As described by the State Water Resources Control Board in WQO 2002-0012, it is appropriate as a prohibition, as the Clean Water Act requires enforcement of all water quality standards, including those not expressed as effluent limitations.

A.3 (creation of pollution, contamination or nuisance prohibited)

This prohibition is new. Creation of a condition of pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code, is prohibited.

A.4 (adverse impacts to beneficial uses or threatened or endangered species is prohibited)

This prohibition is retained from the previous Permit and is based on the Basin Plan, which, in accordance with Section 13241 of the California Water Code, must include water quality objectives to ensure the reasonable protection of beneficial uses and the prevention of nuisance.

A.5 (discharge of radioactive material is prohibited)

This prohibition is retained from the previous Permit, and is consistent with the Basin Plan’s water quality objectives for all inland surface waters and with the water quality objectives specific to waters with the designated beneficial use of municipal and domestic supply.

Effluent Limitations

B.1 (BOD₅, suspended and settleable solids, oil and grease, TDS, sodium, chloride, sulfate, and pH)

The Order requires 85 percent removal of BOD₅ and suspended solids and establishes the following effluent limitations.

Constituent	Units	Monthly (30 day) Average	Weekly (7 day) Average	Daily Maximum
BOD ₅	mg/L	25	35	50
	lbs/day	1022 ¹	1430 ¹	2043 ¹
	kg/day	463 ¹	649 ¹	927 ¹
TSS	mg/L	30	45	90
	lbs/day	1226 ¹	1839 ¹	3678 ¹
	kg/day	556 ¹	834 ¹	1668 ¹
O&G	mg/L	10		20
Set. Solids	ml/L	0.1		0.3
TDS	mg/L			1100
Sodium	mg/L			225
Chloride	mg/L			310
Sulfate	mg/L			180
pH	s.u.		6.5 to 8.3	

¹ Mass emission limitations apply when flows are equal to or greater than 4.9 mgd.

- The U.S. EPA, at 40 CFR 122.102, requires removal efficiencies of 85 percent for BOD₅ and suspended solids as the minimum levels of performance expected of secondary treatment facilities.
- Concentration-based limitations for BOD₅ and suspended solids have been retained from the previous permit. The concentration-based effluent limitations for BOD₅ are more stringent than the technology-based levels of treatment required of secondary plants. (40 CFR 133.102) The concentration-based limitations for suspended solids reflect the minimum performance requirements of secondary plants at 40 CFR 133.102. The daily maximum concentration-based limitations for BOD₅ and suspended solids are retained from the previous Permit and are appropriate to protect against acute water quality effects. The facility has demonstrated compliance with these effluent limitations through past plant performance.
- The mass-based limitations for BOD₅ and suspended solids are retained from the previous Permit and are calculated using the formula: $8.34 \text{ lbs/gal} \times Q \times C$, where Q equals the dry weather design flow rate of 4.9 mgd and C equals the corresponding concentration-based limitation and 8.34 is a conversion factor. Mass-based limitations are meant to prevent the use of dilution to meet concentration-based limits. The dry weather flow rate is used, because pollutant mass in influent should not change appreciably, when infiltration and inflow increase flows above the dry weather design rate.
- Limitations for settleable solids and oil and grease are retained from the previous Permit and are standard secondary treatment requirements.
- Effluent limitations for TDS, sulfate, chloride, and sodium are retained from the previous permit.

B.2 (interim limits for toxics)

Interim effluent limitations, based on water quality criteria from the CTR, are established by this Order for copper, selenium, cyanide, bromoform, chlorodibromomethane, dichlorobromomethane,

and bis(2-ethylhexyl)phthalate. Interim limits and compliance schedules are included, in accordance with Section 2.1 of the SIP, following the Discharger's request and demonstration that it is infeasible to achieve immediate compliance with final effluent limitations based on CTR criteria.

Numeric interim limits for pollutants must be based on current treatment facility performance or on existing permit limitations, whichever are more stringent. In these circumstances, the seven toxic pollutants listed above were not previously limited, and therefore, interim limits are based on current plant performance; i.e., interim limits mirror the highest observed concentrations in plant effluent.

B.3 (final limits for toxics)

For toxic pollutants that show a reasonable potential to cause or contribute to an excursion above State water quality standards (copper, selenium, cyanide, bromoform, chlorodibromomethane, dichlorobromomethane, and bis(2-ethylhexyl)phthalate), in accordance with Section 1.4 of the SIP, final effluent limitations have been established by this Order. The final limitation for bis(2-ethylhexyl)phthalate will become effective only if a study of sampling and analytical procedures determines that this pollutant is not present as a result of contamination during monitoring procedures. Final effluent limitations for the toxic pollutants will become effective five years after the effective date of the Order, as required by the compliance schedules of the Order.

B.4 (limitations for chlorine and dissolved oxygen when the Salinas River is contiguous to the flow of the Nacimiento River)

Limitations for chlorine and dissolved oxygen, when the Salinas River is contiguous to the flow of the Nacimiento River, are retained from the previous permit.

B.5 (adequate disinfection)

Effluent limitations for total coliform bacteria are retained from the previous permit and represent typical standards of disinfection for secondary

treated wastewater to maintain the bacterial quality of receiving waters.

B.6 (flow not to exceed)

The flow limitation is retained from the previous permit and restricts flow to the engineering design capacity of the treatment facility.

B.7 (freeboard)

The limitation requiring two feet of freeboard in the effluent ponds is retained from the previous Permit and helps to assure adequate holding volume during periods of flow variation.

B.8 (solids disposal)

The requirement of Board approval for methods of disposal of sludge, salts, and solid residue is retained from the previous permit.

Compliance Schedules

Based on the Discharger's request and demonstration that it is infeasible to immediately comply with final effluent limits for toxics that are based on water quality criteria of the CTR, interim effluent limits and compliance schedules have been established in accordance with Section 2.1 of the SIP. The schedules of compliance include a series of required tasks, which must be undertaken by the Discharger to demonstrate reasonable progress towards attainment of the final effluent limitations. The SIP requires that schedules of compliance reflect a realistic assessment of the shortest practicable time required to perform each task. Tasks included in compliance schedules of the proposed permit include identification of potential sources of each pollutant; preparation of source control or pollutant minimization plans; implementation of source control and/or pollutant minimization measures and evaluation of alternative WWTP operation and/or treatment upgrades; and implementation of selected WWTP operational measures and/or treatment upgrades. Compliance with final effluent limitations is required five years after the effective date of the Order.

Effluent Toxicity Provisions

The previous Permit included a specific acute toxicity receiving water limitation and required quarterly monitoring for acute toxicity. This Order establishes threshold levels of acute and chronic toxicity, which, when exceeded, will require retesting and implementation of toxicity reduction evaluations, at the discretion of the Regional Board. The quarterly monitoring requirement for acute toxicity is retained from the previous permit; however, a quarterly monitoring requirement for chronic toxicity is added by this Order in accordance with Section 4 of the SIP.

Salt Reduction Plan

Due to on-going attention and concern for the levels of salt in receiving waters, the Regional Board is requiring the Discharger to implement the recommendations of its Salt Management Study, prepared by Carrollo Engineers in February 2001. The study recommended, and the proposed Order requires, completion of specific action steps within 18 months of adoption of the proposed Order and submittal of a report that reevaluates alternative salt control strategies within two years of adoption of the proposed Order.

Receiving Water Limitations

Receiving water limitations within the proposed Order generally include the receiving water limitations of the previous Permit; however, these limitations have been supplemented and modified to closely reflect the water quality objectives of the Basin Plan for all inland surface waters and specifically for waters with the beneficial use designation of municipal and domestic supply.

Pretreatment Plan

Because a local pretreatment program is in place, the proposed permit requires submittal only of that information necessary to identify significant, new dischargers to the WWTP and to evaluate the need for revision of limitations placed on indirect dischargers by the existing pretreatment program.

General Provisions

The six general provisions of the proposed Order are retained from the previous Permit.

Monitoring and Reporting Program

Section 308 of the Clean Water Act and U.S. EPA implementing regulations at 40 CFR 122.44 (i) require monitoring in permits to determine compliance with effluent limitations. Monitoring may also be required to gather data to develop effluent limitations or to monitor impacts of discharges on receiving water quality.

The proposed Monitoring and Reporting Program No. R3-2003-0031 includes monitoring of the City's water supply, wastewater influent and effluent, receiving water, and biosolids.

Because of on-going concerns regarding salt concentrations in treatment plant effluent, monitoring requirements for TDS, sodium, chloride, sulfate, and hardness in the City water supply have been retained from the previous Permit to maintain an understanding of the background concentrations of these dissolved solids and the implications for the City in meeting effluent limitations for these parameters. Analysis for TDS, sodium, chloride, and sulfate on influent samples is no longer required; however, this Order requires analysis of effluent samples for these parameters on a monthly basis to determine compliance with effluent limitations.

Influent monitoring for conventional parameters (BOD₅ and suspended solids) is required to assess treatment plant performance.

Effluent monitoring requirements for the following parameters are not changed from the requirements of the previous Monitoring and Reporting Program by the proposed Order.

- Flow volume
- Instantaneous maximum flow
- Maximum daily flow
- Mean daily flow
- Settleable solids
- pH
- Chlorine used
- Chlorine residual

- Dissolved oxygen
- BOD₅ and suspended solids
- Total coliform organisms
- Temperature
- Oil and grease
- Un-ionized ammonia
- Total ammonia
- Nitrate
- Nitrite
- Total phosphorous

As mentioned above, this Order proposes monitoring of effluent samples for TDS, sodium, chloride, and sulfate on a monthly basis. Effluent monitoring for acute toxicity is retained by the proposed Order; however, quarterly chronic toxicity monitoring is also required based on Section 4 of the SIP. The Monitoring and Reporting Program includes specific procedures for toxicity testing.

Because effluent limitations have been established for copper, selenium, cyanide, chlorodibromomethane, dichlorobromomethane, bromoform, and bis(2-ethylhexyl)phthalate, the proposed Monitoring and Reporting Program includes quarterly effluent monitoring requirements for those parameters to determine compliance with the applicable limitations.

The previous Permit required annual testing for 21 priority, toxic pollutants and testing once during the permit lifetime for 31 other priority toxic pollutants. The proposed Order requires monitoring for all priority toxic pollutants with water quality objectives applicable to the Discharger, established by the California Toxics Rule and by the Basin Plan, including the Title 22 pollutants, which are assigned drinking water maximum contaminant levels in Title 22, Division 4, Chapter 4, Article 3 of the California Code of Regulations. Monitoring for these toxic pollutants will be required one time in the lifetime of the Permit, within the twelve-month period before application is made to renew the waste discharge requirements. Because pollutants with effluent limitations that have shown reasonable potential in the past will be monitored on a routine basis, monitoring for the entire suite of priority toxic pollutants is necessary only one time during the

Permit lifetime. These pollutants are listed in Tables D, E, and F of the proposed Monitoring and Reporting Program, along with required test methods and minimum levels.

With one exception, receiving water monitoring requirements are unchanged from the previous Monitoring and Reporting Program by the proposed Order. The proposed Order requires monitoring for all pollutants of Tables D, E, and F one time during the Permit lifetime. The resulting data will be used to update the background concentrations of the priority, toxic pollutants and to develop and/or modify limitations during permit reissuance, if necessary.

Sludge monitoring requirements of the proposed Order are retained from the previous Monitoring and Reporting Program.

COMPLIANCE HISTORY/STATUS

California Water Code section 13385 requires the Regional Board to assess mandatory penalties for specified effluent violations. Staff is reviewing monitoring data to determine if relevant violations exist. As mentioned earlier, with regards to conventional pollutants, the WWTP produces a consistently high quality secondary effluent. However salts have been an issue for many years. Staff expects to issue a mandatory penalty complaint soon. The complaint may include other effluent violations.

COMMENTS

City of Paso Robles – The public draft permit originally contained schedules for achieving compliance with final effluent limitations that were shorter than those found in the proposed Order (Section C). The City argued that it could not achieve compliance with the schedules staff first proposed. In letters dated April 2 and April 7, 2004, the City provided schedules to perform the steps necessary to achieve compliance with the final effluent limitations. Staff concurs with the City's comments, and the schedule in section C. has been revised accordingly.

State Water Resources Control Board – None

USEPA – None
San Luis Obispo County - None

RECOMMENDATION

Adopt Waste Discharge Requirements Order and Monitoring and Reporting Program No. R3-2004-0031 as proposed.

ATTACHMENTS

1. Location Map
2. Proposed Waste Discharge Requirements Order No. R3-2004-0031
3. Proposed Monitoring & Reporting Program No. R3-2004-0031

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