STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401-7906

WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2004-0031
NPDES NO. CA0047953

Waste Discharge Identification No. 3 400105001
Proposed for Consideration at the May 14, 2004 Meeting

For the

CITY OF EL PASO DE ROBLES,
COMMUNITY OF TEMPLETON and the
CALIFORNIA YOUTH AUTHORITY, EL PASO DE ROBLES BOYS SCHOOL
San Luis Obispo County

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

SITE OWNER AND LOCATION

1. The City of El Paso de Robles (hereafter, the Discharger) operates a wastewater collection, treatment, and disposal system that provides service to the City, the community of Templeton, and to the California Youth Authority - El Paso de Robles Boys School.

2. Templeton Community Services District and El Paso de Robles Boys School own and maintain wastewater collection and transport facilities up to the point of discharge to interceptors owned and maintained by the Discharger.

3. The Discharger's Wastewater Treatment Plant (WWTP) is located adjacent to the Salinas River at 3200 Sulphur Springs Road, El Paso de Robles, San Luis Obispo County, as shown in Attachment A.

PURPOSE OF ORDER

4. On March 13, 2003, the Discharger submitted an Application/Report of Waste Discharge to the Board to update its Waste Discharge Requirements (WDRs), which serve as the Discharger's National Pollutant Discharge Elimination System (NPDES) permit pursuant to Section 402 of the Clean Water Act (CWA). The Board last issued the Discharger's WDRs and NPDES Permit (No. CA0047953) in Waste Discharge Requirements Order No. 98-42 on September 11, 1998.

FACILITY DESCRIPTION

5. **Treatment Facility.** 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).

6. **Discharge.** 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.

7. **Solids Disposal.** Primary and secondary sludges are anaerobically digested and dried

on sludge drying beds before disposal at the City-owned landfill.

8. **Water Supply.** Potable water for the City is supplied by thirteen wells. Although water quality varies among the wells, the water supply, in general, has a TDS concentration of 500 – 600 mg/L, sodium of 50 – 120 mg/L, chloride of 60 – 70 mg/L, sulfate of 110 – 140 mg/l, and hardness of approximately 330 mg/L. The Templeton CommunityServices District and the California Youth Authority have their own wells; and thus, salt concentrations in wastewater influent, which is combined from the three sources, reflects water quality of three potable supply systems as well as contributions of residential, commercial, and industrial discharges to the wastewater collection system.

TREATMENT PERFORMANCE

9. **Conventional/Acute Toxicity.** The WWTP produces a consistently high quality secondary effluent. From 2000 through 2002, effluent consistently met discharge limitations for BOD_5 and suspended and settleable solids and was generally within the pH range of 6.5 to 8.3. Removal efficiencies for BOD_5 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 100 percent effluent. The average daily and peak daily flows were 2.82 and 4.25 mgd, respectively, for the period from 2000 to 2002.

10. **Salts.** Current daily maximum discharge limitations for salts include TDS at 1,100 mg/L, sodium at 225 mg/L, chloride at 310 mg/L, and sulfate at 180 mg/L.

    Although quarterly monitoring for wastewater influent and effluent from 2000 through 2002 indicate significant fluctuation in salt concentrations, the trend is towards more consistent concentrations. 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 TDS, sodium, and chloride continue to be close to their corresponding effluent limitations.

11. In February 2001, the Discharger completed a Salt Management Study to investigate alternatives to reduce salt loadings to the WWTP. Besides evaluating strategies such as source water management, residential water softening management, and industrial/commercial control, 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. Audits should be used to identify significant dischargers that could be targeted for source control requirements.
    - Initiate wastewater monitoring throughout the service area 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.
    - Re-evaluate control strategies after WWTP 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.

12. **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. Circumstances cited by the study included: 1) the Discharger is currently meeting its NPDES Permit limitations, 2) there is no eminent shortage of potable water in the area, 3) existing, local irrigation needs are being met with groundwater, and 4) when discharged to the Salinas River, treated effluent is already being reused for downstream irrigation needs.

13. **Toxics**. Order No. 98-42 has required 1) annual analysis for metals and 2) analysis for organic pollutants (CTR and Basin Plan) one time during the life of the permit. In its application to renew the permit, the Discharger 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, along with annual metals data, as described in subsequent findings, to determine reasonable potential and the need for effluent limitations. No background samples from the receiving water have been collected and analyzed for these toxic pollutants.

BASIN PLAN

14. The Basin Plan was adopted by the Board on September 8, 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.

15. **Beneficial Uses.** The Basin Plan (Table 2-1) identifies the following present and potential beneficial uses for the Salinas River between the Nacimiento and the Santa Margarita Reservoirs.

    a. Municipal and domestic supply.
    b. Agricultural supply.
    c. Industrial process supply.
    d. Ground water recharge.
    e. Water contact recreation.
    f. Non-contact water recreation.
    g. Wildlife habitat
    h. Cold fresh water habitat.
    i. Warm fresh water habitat.
    j. Migration of aquatic organisms.
    k. Spawning, reproduction, and/or early development.
    l. Rare, threatened, or endangered species
    m. Commercial and sport fishing.

Evaluation of Toxic Pollutants

16. **Criteria and Objectives.** The National Toxics Rule (NTR) establishes water quality criteria for toxic pollutants applicable to the Discharger at 40 CFR Part 131. On May 18, 2000, water quality criteria of the NTR were 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. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, 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."

17. 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.

18. **Requirement for Effluent Limitations.** 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."

19. 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.

20. **Reasonable Potential Analysis.** In accordance with the methodology presented in Section 1.3 of the SIP (the Reasonable Potential Analysis or RPA), the most stringent applicable water quality objectives and criteria contained in the Basin Plan, the NTR, and the CTR have been compared to available effluent and background data to determine the need for effluent limitations for toxic pollutants. For toxic pollutants that show a "reasonable potential," effluent limitations have been established in accordance with Section 1.4 of the SIP.

21. The receiving water for the discharge is fresh water, and therefore, fresh water aquatic life criteria have been used in the RPA. Some CTR criteria are hardness dependent; and to determine reasonable potential, a figure of 375 mg/L has been used as a background hardness level within the Salinas River. This figure 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 Paso Robles and at the Highway 41 Bridge.

22. 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 (WEBEL) is required to protect beneficial uses even though both MEC and B are less than C.

23. Based on analyses of effluent samples from Outfalls B and C in 2002 as well as annual analyses for metals, the Regional Board, using methods presented in the SIP, finds that the discharge does demonstrate a reasonable potential to cause or contribute to in-stream excursions above applicable water quality

standards for copper, bis(2-ethylhexyl)phthalate, selenium, cyanide, chlorodibromomethane, bromoform, and dichlorobromomethane.

24. *Copper.* This pollutant, which has important aquatic life and human health impacts, was measured at 29 µg/L in an effluent sample collected in July 2002, above the applicable freshwater, chronic, aquatic life criteria of 28.9 µg/L established by the CTR. Because the discharge of treated wastewater shows a reasonable potential to exceed applicable water quality criteria, this Order establishes the following final WQBELs for copper.

Copper – Final Effluent Limitations	
Avg. Monthly Effluent Limitation (AMEL)	**Maximum Daily Effluent Limitation (MDEL)**
23.6 µg/L	47.4 µg/L

The Discharger has requested interim limitations and a compliance schedule and has demonstrated that immediate compliance with final limitations is infeasible in accordance with Section 2.1 of the SIP. The SIP requires an interim numeric effluent limitation for the pollutant based on current treatment facility performance or previous permit limitations, whichever is more stringent. The limited data preclude meaningful statistical analysis of current treatment performance for this parameter, and the previous Permit did not include a copper limitation. This Order, therefore, establishes an interim daily maximum effluent limitation for copper of 29 µg/L, which is the MEC (Maximum Effluent Concentration) observed between 2000 and 2002. Final WQBELs will become effective in five years following adoption of this Order in accordance with a compliance schedule established in Section C of the Order. The length of this compliance schedule is required due to the anticipated difficulties of identifying and controlling sources that contribute copper to the facility's influent.

25. *Selenium.* This pollutant, which has important aquatic life and human health impacts, was measured at 6 µg/L in an effluent sample collected in October 2002, above the applicable freshwater, chronic, aquatic life criterion of 5 µg/L established by the CTR. Because the discharge of treated wastewater shows a reasonable potential to exceed applicable water quality criteria, this Order establishes the following final WQBELs for selenium.

Selenium - Final Effluent Limitations	
Avg. Monthly Effluent Limitation (AMEL)	**Maximum Daily Effluent Limitation (MDEL)**
4.1 µg/L	8.2 µg/L

The Discharger has requested interim limitations and a compliance schedule and has demonstrated that immediate compliance with final limitations is infeasible in accordance with Section 2.1 of the SIP. The SIP requires an interim numeric effluent limitation for the pollutant based on current treatment facility performance or previous permit limitations, whichever is more stringent. The limited data preclude meaningful statistical analysis of current treatment performance for this parameter, and the previous Permit did not include a selenium limitation. This Order, therefore, establishes an interim daily maximum effluent limitation for selenium of 6 µg/L, which is the MEC observed between 2000 and 2002 based on current WWTP performance. Final WQBELs will become effective in five years following adoption of this Order in accordance with a compliance schedule established in Section C of the Order.

26. *Cyanide.* In October 2002, cyanide was measured in one effluent sample at 39 µg/L, above the freshwater, acute and chronic aquatic life criteria established by the CTR – 22 and 5.2 µg/L, respectively. Because free cyanide is highly toxic to fish and other aquatic organisms, and the discharge of treated wastewater shows a reasonable potential to exceed applicable criteria for the protection of aquatic life, this Order establishes the following WQBELs for cyanide.

Cyanide – Final Effluent Limitations

Average Monthly Effluent Limitation (AMEL)	Maximum Daily Effluent Limitation (MDEL)
4.3 µg/L	8.5 µg/L

The Discharger has requested interim limitations and a compliance schedule and has demonstrated that immediate compliance with final limitations is infeasible in accordance with Section 2.1 of the SIP. The SIP requires an interim numeric effluent limitation for the pollutant based on current treatment facility performance or previous permit limitations, whichever is more stringent. The limited data preclude meaningful statistical analysis of current treatment performance for this parameter, and the previous Permit did not include a cyanide limitation. This Order, therefore, establishes an interim daily maximum effluent limitation for cyanide of 39 µg/L, which is the MEC observed during 2000 through 2002. Final WQBELs will become effective in five years following adoption of this Order in accordance with a compliance schedule established in Section C of the Order. The length of this compliance schedule is justified because of the challenges associated with identifying and controlling sources of cyanide as well as understanding cyanide fate and transport in wastewater treatment processes. There are also on-going State and federal studies examining some uncertainties in the analytical procedures for cyanide.

27. *Bromoform, Chlorodibromomethane, and Dichlorobromomethane.* These three pollutants are known as trihalomethanes and typically result as byproducts of chlorine disinfection. Bromoform and chlorodibromomethane are classified by the U.S. EPA as probable human carcinogens. Dichlorobromomethane is considered a possible human carcinogen but is viewed primarily as a liver toxicant. At least one of these trihalomethanes was present in each of three effluent samples analyzed in 2002. Bromoform was measured at 6.4 µg/L, above the human health criterion of 4.3 µg/L for the consumption of water and organisms as established by the CTR. Chlorodibromomethane was measured at 4.5 µg/L, and dichlorobromomethane was measured at 5.5 µg/L, both at concentrations above the applicable human health criteria for the consumption of water and organisms of 0.41 µg/L and 0.56 µg/L, respectively, as established by the CTR. Because these three pollutants have been measured at these concentrations, the discharge of treated wastewater shows a reasonable potential to exceed applicable criteria for the protection of human health, and this Order establishes the following final WQBELs for bromoform, chlorodibromomethane, and dichlorobromomethane.

Trihalomethanes - Final Effluent Limitations

	Avgerage Monthly Effluent Limitation (AMEL)	Maximum Daily Effluent Limitation (MDEL)
Bromoform	4.3 µg/L	8.6 µg/L
Chlorodibromomethane	0.4 µg/L	0.8 µg/L
Dichlorobromomethane	0.6 µg/L	1.1 µg/L

The Discharger has requested interim limitations and has demonstrated that immediate compliance with final limitations is infeasible in accordance with Section 2.1 of the SIP. The SIP requires interim numeric effluent limitations for the pollutants based on current treatment facility performance or previous permit limitations, whichever is more stringent. The limited data preclude meaningful statistical analysis of current treatment performance for the trihalomethanes, and the previous Permit did not include limitations for them. This Order, therefore, also establishes the following interim daily maximum effluent limitations, based on the MECs observed from 2000 through 2002 for bromoform, chlorodibromomethane, and dichlorobromomethane.

Trihalomethanes - Interim Effluent Limitations

Trihalomethane	Daily Maximum Effluent Limitation - µg/L
Bromoform	6.4
Chlorodibromomethane	4.5
Dichlorobromomethane	5.5

Final WQBELs will become effective in five years following adoption of this Order in accordance with a compliance schedule established in Section C of the Order.

28. *Bis(2-ethylhexyl)phthalate.* This pollutant, which is widely used as a plasticizer, has been classified by the U.S. EPA as a probable human carcinogen. It was detected in each of three effluent samples analyzed in 2002 and was measured at 5 µg/L in two of those samples. For this discharge to the Salinas River, which is designated as a source of municipal and domestic supply by the Basin Plan, applicable criteria include the Title 22 MCL of 4 µg/L and the human health criterion for consumption of water and organisms of 1.8 µg/L established by the CTR.

    Because bis(2-ethylhexyl)phthalate has been detected at relatively low concentrations, and because this compound 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, within 90 days following adoption of this Order, the Discharger must complete a study of its procedures for sampling and analysis of the CTR pollutants and then take the steps necessary to ensure that samples collected in the future will not be contaminated with bis(2-ethylhexyl)phthalate. After the 90-day period, the Discharger must collect effluent samples approximately one time every three months from Outfall B or C to be analyzed for this pollutant. If bis(2-ethylhexyl)phthalate is not detected by this monitoring, effluent limitations will not become effective. If bis(2-ethylhexyl)phthalate is quantified above the appropriate method detection limit at least one time in this monitoring, an interim effluent limitation of 5.0 µg/L will become immediately effective, and the following final WQBELs will become effective in five years following adoption of this Order.

Bis(2-ethylhexyl)phthalate – Final Effluent Limitations

Avg. Monthly Effluent Limitation (AMEL)	Maximum Daily Effluent Limitation (MDEL)
1.8 µg/L	3.6 µg/L

Compliance with final limitations must be achieved in accordance with the compliance schedule established in Section C of this Order.

Changes to Waste Discharge Requirements

29. In Section A, this Order adds standard discharge prohibitions related to the creation of pollution, contamination, and nuisance; adverse effects on beneficial uses; and the discharge of radioactive substances.

30. Within Section B, this Order retains the concentration and mass-based effluent limitations of the previous Order for BOD_5, settleable solids, oil and grease, pH, TDS, sodium, chloride, and sulfate. This Order also retains the 85 percent removal efficiency requirements for BOD_5 and suspended solids.

31. This Order retains the mass limitations for suspended solids from the previous Order. The previous Order did include two sets of concentration limitations for TSS - one set of limits that applied at Outfalls B and C, when there was flow in the Salinas River and another set that applied at Outfall A, when there was no flow in the river. This Order retains only the limitations of the previous Order for Outfalls B and C. These limits are consistent with standard secondary treatment requirements applied at the end of the treatment process (i.e., the final polishing ponds). Monitoring data for 2000-2002 generally show that the Discharger can comply with the new application of suspended solids limitations.

32. Within Section B, this Order adds interim and final effluent limitations for certain toxic pollutants – copper, selenium, cyanide, bromoform, chlorodibromomethane, dichlorobromomethane, and bis(2-ethylhexyl)phthalate.

33. This Order adds schedules for compliance with final effluent limitations for certain toxic pollutants in Section C.

34. The previous Order included an acute toxicity objective to be maintained in the receiving water and a monitoring requirement for acute toxicity. To comply with requirements of the SIP, this Order includes monitoring requirements for both acute and chronic toxicity and describes threshold levels of toxicity, which will trigger additional requirements for the identification of toxicity and its reduction. Updated toxicity determination procedures have been included to comply with current methods and SIP requirements.

35. Section E of this Order is a requirement to implement the recommendations of the Salt Management Study completed by the Discharger in February 2001. Although salt levels have been lower in recent monitoring, the levels continue to approach permit limits. In addition, the receiving water has been identified as impaired for chloride and sodium. The Board, therefore, has determined that actions identified by the Discharger in 2001 should be implemented.

36. Receiving water limitations within Section F of this Order have been modified to reflect updated objectives of the Basin Plan. These limitations now include specific water quality objectives and criteria for chemical pollutants derived from the Basin Plan, from the State's Department of Health Services list of Maximum Contaminant Levels within Title 22 of the California Code of Regulations, and from the NTR and CTR as listed at 40 CFR 131.38.

37. Monitoring and Reporting Program No. R3-2003-0031 has been modified from the previous Program to include monitoring requirements for the toxic pollutants that have interim and/or final WQBELs established by this Order. In addition, monitoring for TDS, sodium, chloride, and sulfate will be performed on effluent rather than influent samples, and the frequency of this testing has been increased from quarterly to monthly to allow a better determination regarding the effectiveness of the Discharger's efforts to reduce its discharge of salts. The frequency of influent monitoring for BOD_5 and total suspended solids is increased to a weekly basis by this Order, and the timing of this monitoring must now coincide with effluent monitoring for BOD_5 and total suspended solids to allow better determination of removal efficiencies. This Order limits the use of Outfall A in the Monitoring and Reporting Program, except for monitoring of settleable solids and total coliform bacteria; and throughout the Monitoring and Reporting Program a preference for effluent sample collection at Outfall B, the routine point of discharge, is now expressed in the requirements. And, the Program now includes detailed sampling and analytical requirements for the Basin Plan, Title 22, and CTR pollutants in both WWTP effluent and in the receiving water.

General Findings

38. **California 303(d) List and Total Maximum Daily Loads (TMDLs).** The 2002 Section 303(d) List of Water Quality Limited Segments [the 2002 303(d) List], approved by the State Water Resources Control Board on February 4, 2003, identifies the Salinas River as impaired by chlorides and sodium. The 2002 303(d) List has not yet been approved by USEPA. When a TMDL is completed for this segment of the Salinas River, this Permit will be re-opened, as necessary, to incorporate wasteload allocations and associated Permit limits assigned to the Discharger.

39. **CEQA.** Waste discharge requirements for this discharge are 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.

40. The U.S. EPA, at 40 CFR Parts 122 and 123, requires specific categories of industrial activities to obtain an NPDES permit and to implement Best Management Practices to control pollutants in storm water discharges. All storm water flow from the area of the Discharger's WWTP is directed to the evaporation/percolation ponds and is discharged with treated wastewater. As such, this Order/Permit regulates the discharge of all industrial storm water from the facility.

41. **California Water Code Section 13263.6(a).** In accordance with California Water Code Section 13263.6 (a), the Regional Board shall prescribe effluent limitations as part of the waste discharge requirements of a publicly owned treatment works (POTW) for all substances for which 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)) indicate as discharged into the POTW, for which the State Water 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. Evaluation of wastewater constituents in the discharge determined that no need exists to include WQBELs in accordance with California Water Code Section 13263.6 (a).

42. **Anti-backsliding.** In the renewal of the Discharger's NPDES permit with adoption of this Order, effluent limitations have not been made less stringent than in the previous Permit/Order, thus maintaining compliance with anti-backsliding provisions of the Clean Water Act.

43. **Anti-Degradation.** Modifications of this Permit from limitations and conditions of the previous Permit will not affect the quality of the discharge nor cause degradation of receiving water quality.

44. Section 13385 of the California Water Code requires the Regional Board to impose mandatory penalties for chronic and serious violations of NPDES requirements. Failure to comply with NPDES requirements and conditions may result in enforcement action by the Board.

45. A permit and the privilege to discharge waste into waters of the State are conditional upon the discharge complying with provisions of Division 7 of the California Water Code and of the CWA (as amended or as supplemented by implementing guidelines and regulations) and with any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisance. This Order shall serve as an NPDES permit pursuant to Section 402 of the CWA.

46. Pursuant to Sections 13267 and 13383 of the California Water Code, this Order requires the Discharger to conduct monitoring and provide reports as specified in Monitoring and Reporting Program R3-2003-0031, which accompanies this Order. Monitoring and reporting is necessary for the Board to determine compliance with this Order. The Discharger is also required under this Permit to provide effluent monitoring reports for priority pollutants to enable the Board to establish effluent limitations under the CTR, if necessary.

47. Any person affected by this action of the Board may petition the State Water Board to review the action in accordance with Section 13320 of the California Water Code and Title 23 of the California Code of Regulations, Section 2050. The State Water Board must receive the petition within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request.

48. On February 6, 2004, the Board notified the Discharger and interested agencies and

persons of its intent to reissue WDRs for the discharge and has provided them with a copy of the proposed Order and an opportunity to submit written views and comments, and scheduled a public hearing.

49. In a public hearing on May 14, 2004, the Board heard and considered all comments pertaining to the discharge and found this Order consistent with the above findings.

IT IS HEREBY ORDERED, pursuant to authority in Sections 13263 and 13377 of the California Water Code, that the City of El Paso de Robles; the Templeton Community Services District; and the California Youth Authority, El Paso de Robles Boys School; their agents, successors, and assigns, may discharge waste from the City's Wastewater Treatment Plant providing compliance is maintained with the following:

All technical and monitoring reports submitted pursuant to this Order are required by Sections 13267 and/or 13383 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order and by attachments to this Order, or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer, may subject the Discharger to enforcement action pursuant to Sections 13268 and/or 13385 of the California Water Code. The Board will base all enforcement actions on the date of adoption of this Order.

(Note: General Permit conditions, definitions and the method of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for National Pollutant Discharge Elimination System Permits," dated January 1985, and incorporated by this reference.

A. DISCHARGE PROHIBITIONS

1. Discharge of treated wastewater at a location other than that described by this Permit as the outfall from Pond 6 (Outfall B at 35°39'30" North Latitude and 120°41'11" West Longitude), except for discharge from Pond 3 (Outfall C at 35°38'59" North Latitude and 120°41'11" West Longitude) during pond maintenance activities or as needed to ensure compliance with this Order, is prohibited.

2. The discharge of any waste not specifically regulated by this Permit to a storm drain system or to waters of the United States is prohibited.

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

4. Adverse effects of the discharge to beneficial uses of water or threatened or endangered species is prohibited.

5. The discharge of radioactive substances is prohibited.

B. EFFLUENT LIMITATIONS

Effluent limitations of this Order apply to Outfalls B and C.

1. 30-Day Average Removal Efficiencies for total non-filterable residue (total suspended solids) and BOD_5 discharged to the Salinas River shall not be less than 85%. In addition, effluent shall not exceed the following 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[2]	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 at all times		

TSS = Total Suspended Solids TDS = Total Dissolved Solids
Set. Solids = Settleable Solids O&G = Oil and Grease

[1] Mass emission limitations apply when flows are equal to or less than 4.9 mgd.

2. Interim Limitations for Toxic Substances: Effluent discharged to the Salinas River shall

not exceed the following interim limitations for toxic pollutants, which, except for the limitation for bis(2-ethylhexyl)phthalate, will become effective upon adoption of this Order.

	Interim Daily Maximum Effluent Limitation
Copper	29 µg/L
Selenium	6.0 µg/L
Cyanide	39 µg/L
Bromoform	8.6 µg/L
Chlorodibromomethane	4.5 µg/L
Dichlorobromomethane	5.5 µg/L
Bis(2-ethylhexyl)phthalate[1]	5.0 µg/L

[1] The interim limitation for bis(2-ethylhexyl)phthalate will become effective 6 months after adoption of this Order, only as described in Section C of this Order.

3. Final Limitations for Toxic Substances: Effluent discharged to the Salinas River shall comply with the following final WQBELs for toxic pollutants. These limitations are effective on the date indicated and shall be achieved in accordance with the compliance schedules established for each pollutant in Section C of this Order.

	Avg. Monthly Effluent Limitation	Max. Daily Effluent Limitation
Copper	23.6 µg/L	47.4 µg/L
Selenium	4.1 µg/L	8.2 µg/L
Cyanide	4.3 µg/L	8.5 µg/L
Bromoform	4.3 µg/L	8.6 µg/L
Chlorodibromomethane	0.4 µg/L	0.8 µg/L
Dichlorobromomethane	0.6 µg/L	1.1 µg/L
Bis(2-ethylhexyl)phthalate	1.8 µg/L	3.6 µg/L

Final WQBELs for copper, selenium, bromoform, chlorodibromomethane, dichlorobromomethane, and cyanide shall become effective five years after adoption of this Order. Final WQBELs for bis(2-ethylhexyl)phthalate shall become effective five years after adoption of this Order, if final limitations are established, as described in Section C of this Order.

4. Effluent discharged to the Salinas River, when surface flow is contiguous with the Nacimiento River, shall not exceed the following limitations:

Constituent	Units	Limitation
Chlorine Residual	mg/L	Undetectable by amperometric titration or an equally sensitive method
Dissolved Oxygen	mg/L	Minimum of 2.0 at any time

5. Effluent shall be adequately disinfected so that the median most probable number (MPN) of coliform organisms does not exceed 23 per 100 ml, as determined from the bacteriological results of the last seven days for which analyses have been completed. The MPN of coliform organisms shall not exceed 2300 per 100 ml in any sample.

6. The discharge shall not contain substances in concentrations that are toxic to, or which produce detrimental physiological responses in human, plant, or animal (particularly fish or aquatic) life.[B]

7. Daily dry weather flow shall not exceed a monthly average of 4.9 mgd (18,550 m^3/day). Peak wet weather flow shall not exceed 10.0 mgd.

8. Freeboard shall exceed two feet in the effluent ponds at all times (unless technical justification is provided to support lesser freeboard.)

9. All accumulated sludge, salts, and solid residue shall be disposed of in a manner approved by the Executive Officer.

C. COMPLIANCE SCHEDULES

The Discharger shall adhere to the following schedules to achieve compliance with final effluent limitations for toxic pollutants that have been established by this Order.

1. *Copper, Selenium, Cyanide, Bromoform, Chlorodibromomethane, and Dichlorobromomethane*

Compliance Schedule for Copper, Selenium, Cyanide, Bromoform, Chlorodibromomethane, and Dichlorobromomethane Final Effluent Limitations	
Interim Requirement	**Completion Date**
1. Identify potential sources by collection system sampling and analysis and by audits of dischargers to the collection system	12 months after adoption of this Order
2. Evaluate wastewater treatment operational practices (particularly chlorination steps for the trihalomethanes) to identify potential sources.	18 months after adoption of this Order
3. Prepare Source Control Plan and/or a Pollutant Minimization Plan	24 months after adoption of this Order
4. Implement source control and/or pollutant minimization measures and evaluate treatment upgrades necessary to achieve compliance with final limitations.	30 months after adoption of this Order
5. Submit interim letter report to the Regional Board, which summarizes the effectiveness of source control and/or pollutant minimization measures.	42 months after adoption of this Order
6. Submit to the Regional Board a performance summary for source control and/or pollutant minimization measures and a final action plan to be implemented in Step 7	54 months after adoption of this Order
7. Implement selected WWTP operational measures and/or complete treatment upgrades	5 years after adoption off this Order

The Discharger shall notify the Board, in writing, no later than fourteen days following each completion date, of its compliance or non-compliance with interim requirements.

2. *Bis(2-ethylhexyl)phthalate.*

Within 90 days following adoption of this Order, the Discharger shall complete a study of its 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. After the 90-day period, the Discharger shall collect effluent samples approximately one time every three months from Outfall B or C to be analyzed for this pollutant. If bis(2-ethylhexyl)phthalate is not detected by this monitoring, effluent limitations will not become effective for this pollutant. If bis(2-ethylhexyl)phthalate is quantified, above the appropriate method detection limit, at least one time in this monitoring period, an interim effluent limitation of 5.0 µg/L will become immediately effective, and the final effluent limitations will become effective in 5 years following adoption of this Order. Compliance with final effluent limitations will be achieved in accordance with the compliance schedule in C.1. above for copper, et al.

D. EFFLUENT TOXICITY PROVISIONS

When toxicity monitoring finds acute toxicity in the effluent or chronic toxicity above 1 TUc, the Discharger shall resample within 10 days and submit the results to the Executive Officer (EO). The EO will determine whether to initiate enforcement action, whether to require the Discharger to implement toxicity reduction evaluation (TRE) requirements, or to implement other measures. The Discharger shall conduct a TRE if repeated tests reveal toxicity as a result of the discharge. Failure to conduct required toxicity tests or a TRE within the time period specified below or by the EO shall result in the establishment of effluent limitations for chronic toxicity in a permit or appropriate enforcement action. This permit may be reopened for that purpose. When required, the Discharger shall implement a TRE as outlined below. The U.S. EPA's Toxicity Reduction Evaluation Procedures, Phases 1, 2, and 3 (EPA document nos. EPA 600/3-88/034, 600/3-88/035, and 600/3-88/036, respectively) and *TRE Protocol for Municipal Wastewater Treatment Plants* (EPA 600/2-88/062) shall be the basis for this evaluation.

Action Step	When Required
Take all reasonable measures necessary to immediately reduce toxicity, where source is known	Within 24 hours of identification of noncompliance
Submit to the EO a TRE study plan describing the toxicity reduction procedures to be employed	Within 60 days of identification of noncompliance
Initiate the TRE	Within 7 days of notification by the EO
Conduct the TRE following the procedures in the plan	One year period or as specified in the plan
Submit the results of the TRE, including summary of findings, required corrective action, and all results and data.	Within 60 days of completion of the TRE
Implement corrective actions to meet Permit limits and conditions	To be determined by the EO
Return to regular monitoring after implementing corrective measures and approval by the EO.	To be determined by the EO

E. SALT REDUCTION PLAN

Within 18 months after adoption of this Order, the Discharger shall take the following action steps identified in its Salt Management Study of February 2001.

1. Conduct audits of commercial and industrial dischargers to identify large water softening operations and other potential sources of salt contributions to wastewater. Audits should be used to identify significant dischargers that could be targeted for source control requirements.

2. Initiate wastewater monitoring throughout the service area 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.

3. Require development and implementation of Salt Management Plans by industrial and commercial facilities identified as potentially significant dischargers.

4. Establish numeric concentration goals for TDS, sodium, sulfate, and chloride in WWTP influent.

5. Reevaluate control strategies after WWTP 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.

In accordance with the Salt Management Study, the final recommendation to be implemented is the re-evaluation of alternative salt control strategies. A report of this re-evaluation shall be submitted to the Board within two years of adoption of this Order.

F. RECEIVING WATER LIMITATIONS

(Receiving water quality is a result of many factors, some unrelated to the discharge. This Permit considers these factors and is designed to minimize the influence of the discharge on the receiving water)

The discharge shall not cause, or contain:

a. pH of the receiving water to fall below 7.0 or exceed 8.3.

b. Coloration of the receiving water that causes nuisance or adversely affects beneficial uses. Coloration attributable to materials of waste origin shall not be greater than 15 units or 10 percent above the natural background color of the receiving water, whichever is greater.

c. Taste and odor producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses within the Salinas River.

d. Floating material, including solids, liquids, foams, and scum in concentrations that cause nuisance or adversely affect beneficial uses within the Salinas River.

e. Suspended material in concentrations that cause nuisance or adversely affect beneficial uses within the Salinas River.

f. Settleable material in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses within the Salinas River.

g. Oils, greases, waxes or other similar materials in concentrations that result in a visible film or coating on the water surface or on objects in the water, that cause nuisance, or otherwise adversely affect beneficial uses.

h. Biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses within the Salinas River.

i. Alteration of the suspended sediment load and suspended sediment discharge rate within the Salinas River in such a manner as to cause nuisance or adversely affect beneficial uses.

j. An increase in turbidity within the receiving water above the following, applicable standard.

   1. When background turbidity is less than 25 NTUs, increases shall not exceed 5 NTUs.
   2. Where background turbidity is between 25 and 50 NTUs, increases shall not exceed 20 percent.
   3. Where background turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs.
   4. Where background turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.

k. Dissolved oxygen concentrations in the Salinas River to be reduced below 5 mg/L at any time. Median values should not fall below 85 percent saturation as a result of controllable water conditions.

l. An alteration of the natural receiving water temperature.

m. Concentrations of unionized ammonia to exceed 0.025 mg/L in the receiving water.

n. An individual pesticide or combinations of pesticides at concentrations that adversely affect beneficial uses of the receiving water. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life within the receiving water. For waters where existing concentrations of total identifiable chlorinated hydrocarbon pesticides are presently nondetectable, discharges shall not cause concentrations to be at detectable levels within the accuracy of analytical methods prescribed in the latest edition of *Standard Methods for the Examination of Water and Wastewater* or other methods approved by the Regional Water Board.

o. The following organic substances to be present in receiving waters above the concentration in parentheses: Methylene Blue Activated Substances (0.2 mg/L), PCBs (0.3 µg/L), and phthalate esters (0.002 µg/L).

p. Chemical pollutants at concentrations in excess of the Maximum Contaminant Levels for Inorganic Chemicals specified in Title 22 of the California Code of Regulations, Chapter 15, Article 4, Section 64431.

q. Chemical pollutants at concentrations in excess of the Maximum Contaminant Levels for Organic Chemicals specified in Title 22 of the California Code of Federal Regulations, Chapter 15, Article 5.5, Section 64444.

r. Concentrations of toxic pollutants in the receiving water above the applicable freshwater aquatic life and human health criteria for consumption of water and organisms as established by the NTR and the CTR and presented at 40 CFR 131.38

s. Toxic substances in the Salinas River in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or aquatic life.[C,E]

t. Acute or chronic toxicity conditions in the Salinas River[E]. Acute toxicity is defined as less than 90% survival, 50% of the time and less than 70% survival, 10% of the time of standard test organisms in undiluted effluent in a 96-hour static or continuous-flow test.

u. Phenol concentrations in excess of 1.0 µg/L.

v. Concentrations of natural and man-made radionuclides in excess of the limits specified in Title 22 of the California Code of Regulations, Chapter 15, article 5, Sections 64441 and 64443.

G. PRETREATMENT REQUIREMENTS

1. This Order does not include provisions requiring the development and implementation of an industrial pretreatment program in accordance with U.S. EPA requirements at 40 CFR part 403. In place of formal pretreatment requirements, this Order requires that the following information be submitted with the discharger's annual report.
   - A listing of all new industries to the City's service area with adequate information to characterize the quantity and quality of the industrial discharges.
   - A detailed report of incidents of pass-through or upset caused by industrial discharges to the City's collection system.
   - A summary report of inspections/audits of industries that discharge to the City's collection system, as well as analytical results of industrial discharges. This report shall include any corrective and/or enforcement actions taken.

H. GENERAL PROVISIONS

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 98-42, adopted by the Board on September 11, 1998. Order No. 98-42 is hereby rescinded.

2. The Discharger shall comply with Monitoring and Reporting Program No. R3-2003-0031, as ordered by the Executive Officer.

3. The Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for National Pollutant Discharge Elimination System Permits," dated January 1985, except paragraph (a) of Item E.1. shall apply only if the bypass is for essential maintenance to ensure efficient operation.

4. The Discharger shall maintain a record of all septic waste loads received at the treatment facility. This record shall include the load date, quantity, and source. The Discharger shall maintain a program to ensure waste incompatible with the treatment process is not received.

5. The Discharger shall post, in English and Spanish, in the area of the surface discharge to the Salinas River, to warn of the discharge of treated wastewater.

6. Annually, the Discharger shall remove accumulated solids from the evaporation/percolation ponds. Annual solids removal shall not be required if the Discharger demonstrates that an insignificant amount of solids has accumulated during the previous year. The ponds shall be maintained in a manner to prevent structural damage caused by high water levels in the river.

7. This Permit may be modified in accordance with the requirements set forth at 40 CFR Parts 122 and 124, to include appropriate conditions or limits based on newly available information, or to implement any, new State water quality objectives that are approved by the U.S. EPA.

8. This Order expires May 14, 2009, and the Discharger must file a Report of Waste Discharge in accordance with Title 23, Chapter 3, Subchapter 9, of the California Administrative Code, no later than November 15, 2008.

I, **Roger W. Briggs, 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 Coast Region, on May 14, 2004.

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Roger W. Briggs, Executive Officer

TJK
Paso Robles WWTP
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