

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2004-0152

NPDES NO. CA0077844

WASTE DISCHARGE REQUIREMENTS
FOR
QUINCY COMMUNITY SERVICES DISTRICT
WASTEWATER TREATMENT PLANT AND COLLECTION SYSTEM
PLUMAS COUNTY

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

REPORT OF WASTE DISCHARGE

1. The Quincy Community Services District (QCSD), hereafter Discharger, submitted a complete report of waste discharge (ROWD) on 5 December 2003, under the National Pollutant Discharge Elimination System (NPDES), and applied for a permit renewal to discharge treated wastewater (effluent) to Spanish Creek and/or Clear Stream, a tributary to Spanish Creek. Spanish Creek is tributary to the East Branch of the North Fork of the Feather River.

**WASTEWATER TREATMENT, WASTEWATER COLLECTION,
AND GENERAL SITE INFORMATION**

2. Quincy and East Quincy are approximately 50 miles northeast of Oroville and approximately 70 miles northwest of Reno. The Discharger owns and operates the Quincy wastewater collection system (sewer system) and wastewater treatment plant (Plant). The East Quincy Community Services District (EQCSD) owns and operates the wastewater collection system for East Quincy.
3. The population served by the Discharger is approximately 1,880. The population served by the EQCSD is approximately 2,572. The two districts are contiguous and neither Quincy nor East Quincy is incorporated.
4. In October of 1995, the Discharger and EQCSD entered into a joint powers agreement for the operation of the Plant under the oversight of the American Valley Services Authority, and for collection of the fees associated with wastewater collection and treatment. The joint powers agreement was formulated to be applicable in perpetuity unless both parties revise it.
5. The Plant and wastewater discharge are within Section 11, 12, and 14 T24N, R9E, MDB&M, as shown in Attachment A, a part of this Order. The Plant property is owned by the Discharger (AP No. 115-160-60). The sewer system, Plant, and discharge lie within the Quincy Hydrologic

Unit No. 518.52, as depicted on interagency hydrologic maps prepared by the State of California Department of Water Resources (DWR) in August 1986.

6. The Plant consists of: 1) a headworks with influent flow measurement; 2) two parallel trains of rotating biological contactors; 3) approximately one acre of stabilization/polishing ponds; 4) chlorination; 5) dechlorination; 6) an irrigation storage pond; and 7) an emergency storage pond (approximately 35 acres). There is also a septage receiving station at the Plant.
7. From 1 November to 15 May of each year discharge of effluent to Spanish Creek, a water of the United States, is permitted at the point latitude 39°48'15" North and longitude 120°29'29" West. Outside of this seasonal window discharge is prohibited, due to recreational use of Spanish Creek. Some exceptions to this prohibition may be granted by the executive officer if certain conditions are met. Flood irrigation of nearby Leonhardt Ranch (regulated by Order No. 96-020), takes place during the period that discharge to Spanish Creek is prohibited.
8. Currently, effluent is initially discharged to Clear Stream, a tributary of Spanish Creek. Clear Stream typically becomes dry in July, with no subsequent flow until the rainy season begins in the fall. Clear Stream was created to minimize flooding in parts of Quincy. A large portion of the watershed that flows to Clear Stream originally discharged runoff to Spanish Creek several miles upstream of the Plant.
9. Clear Stream is a water of the United States in accordance with the Clean Water Act. If the discharge to Clear Stream continues as in the past, Plant effluent will be the sole source of water in the stream at times. Because of the lack of dilution, Plant effluent limitations would have to be set equal to water quality objectives. Some metals are pollutants of concern in the Discharger's effluent, and are very difficult to remove to the water quality objective concentrations. Meeting water quality objectives could entail expensive capital improvements, and accompanying costly operation and maintenance. Therefore, the Discharger is investigating methods of discharging directly to Spanish Creek. Working in conjunction with the Northern Feather River Consolidated Resource Management Group, the Discharger is considering a habitat enhancement and flood control project. This project would consist of a discharge of wastewater to the existing emergency storage pond, with overland flow to the north, creating an artificial wetland. To the north of the Plant landowners propose to dedicate portions of their property to be utilized for additional settling ponds and wetlands. Wastewater would eventually discharge to Spanish Creek at the current location at the mouth of Clear Stream. Flow from Clear Stream could be diverted at times to the created wetlands and ponds to enhance their habitat value. This Order requires the Discharger to determine, within eight months of permit adoption, whether the outfall location will be modified in accordance with the above plan, and based upon that determination, complete studies and provide a plan for compliance with the effluent limitations contained in this Order.
10. Treated effluent is stored in the irrigation storage pond prior to irrigation of the Leonhardt Ranch, directly east of the Plant. During the irrigation season, Clear Stream is dammed just downstream of the Plant discharge. Treated effluent is then pumped out of Clear Stream for flood irrigation.

11. The ROWD describes the Plant effluent as follows:

Monthly Average Flow (previous three years): 0.81 million gallons per day (mgd)
 Daily Peak Wet Weather Flow (highest of last three years): 3.1 mgd
 Design Flow (dry weather): 1.6 mgd
 pH: 6.4 minimum, 7.3 maximum

<u>Constituent</u>	<u>mg/L</u>	<u>lb/day</u>
BOD ¹	27	360 ²
Total Suspended Solids	25	334 ²

¹5-day, 20°C biochemical oxygen demand
²Based upon permitted flow of 1.60 mgd

12. A schematic drawing of the Plant, irrigation and emergency storage ponds, and discharge to Clear Stream is shown in Attachment B, a part of this Order.
13. The polishing/stabilization ponds and the irrigation pond were constructed with a six-inch layer of compacted bentonite to prevent winter groundwater intrusion into the ponds. Soil conditions beneath these ponds, specifically soil permeability, are unknown. No information is available regarding the constructed permeability of the bentonite layer.
14. According to the Discharger, the emergency storage pond is not lined. Permeability of the emergency storage pond base and berms is unknown.
15. The Plant lies within the boundaries of the 100-year flood plain of Spanish Creek according to Federal Emergency Management Agency (FEMA) maps. In the last 100 years Spanish Creek has been incised to approximately six feet below its natural channel, due to flood prevention efforts. Because of the increased stream channel cross-sectional area (due to the increased channel depth), Spanish Creek has not overtopped its banks in the last ten years, despite two years of rainfall during that same period that exceeded the 100-year return frequency annual rainfall.
16. Wastewater collection system infiltration and inflow (I/I) consists of groundwater and surface water that enters a sewer system through leaky collection system pipelines, manholes, and manhole covers. All domestic sewer systems experience some I/I. However, the Discharger has experienced abnormally high I/I for many years. The conditions that are generally thought to be responsible for the Discharger's problems include an aged system subject to breakage, some misaligned joints, some poorly constructed lateral connections into the sewer mains, etc., and high groundwater allowing water intrusion into the collection system. The Discharger implements a program to identify and repair areas that are especially susceptible to I/I.
17. In the last several years the Discharger has replaced approximately 8,000 feet of force main from the community college northwest of the Plant to the headworks lift station, and also a section of gravity line in the downtown area that was particularly prone to I/I. It appears that the collection line repair and replacement have reduced the magnitude of severe peaking flows. As their

budget allows, the Discharger plans to repair additional sections in the collection system where there are known problems.

18. The EQCSD has an ongoing maintenance program for their collection system. They televise approximately 25 per cent of the system each year. As the system is fairly new, and constructed with PVC, I/I is expected to be minimal in this system, at least in the near future.
19. Both the Discharger and the EQCSD are installing new flow meters at their discharges to the Plant to obtain accurate data on the respective flow contribution from each District. Currently, both the force main from the Discharger's pumping station and the force main from the EQCSD contain meters just upstream of the Plant headworks.
20. In September 2003, the Discharger removed approximately 150 cubic yards of sludge from their emergency storage pond. The Discharger plans to dry the sludge on site prior to disposal; such disposal must be in conformance with Sludge Disposal Requirements, D.1. through D.5.
21. Groundwater in the vicinity of the Plant is at or near ground surface during the winter. No data on groundwater quality near the Plant are available from the Discharger.
22. The Discharger operates four wells and two springs for municipal water supply. The Discharger's water supply is connected into the EQCSD system to allow use of the additional EQCSD system capacity when the Discharger does not have adequate supply.
23. The EQCSD operates several wells for municipal supply. The wells are a minimum of one mile from the Plant.
24. The Discharger maintains a 1,000-gallon fuel storage tank at the Plant for emergency operation of a generator providing backup power. All pump stations in the Discharger's collection system are equipped with emergency generators and fuel storage. However, all pump station fuel tanks are less than 550 gallons, or store propane, and therefore are not regulated by Health and Safety Code, Chapter 6.67, *Aboveground Storage of Petroleum*.
25. Average annual rainfall in the Quincy area is 40 inches. The 100-year return frequency rainfall season precipitation is 76.5 inches. A portion of the annual precipitation falls as snow. Average annual evaporation in the area is 35.5 inches.
26. Review of the Discharger's self-monitoring reports for the last five years reveal that they have generally been in compliance with their NPDES permit. However, on four occasions, serious violations occurred as defined by Sections 13385 (k) and (i) of the Water Code. The violations were all for excessive effluent chlorine concentrations. These violations subject the Discharger to mandatory minimum penalties.

27. The monitoring report review also indicated that the Discharger has had occasional difficulty meeting effluent acute toxicity limitations. Monitoring and Reporting Program No. R5-2004-0152 of this Order requires the Discharger to conduct three additional acute toxicity tests upon confirmation of a violation of the acute toxicity effluent limit. Of the three additional tests, if the results of any single test is less than 70 percent survival, or any two tests are less than 90 percent survival, then the Discharger is required to perform a Toxicity Reduction Evaluation in accordance with the provisions of this Order.
28. The discharge is currently governed by Order No. 99-020 adopted on 30 April 1999.
29. The U. S. Environmental Protection Agency (USEPA) and the Regional Board have classified this discharge as a major discharge.

WATER QUALITY CONTROL PLAN, NATIONAL TOXICS RULE, AND CALIFORNIA TOXICS RULE

30. The Regional Board adopted a Water Quality Control Plan, Fourth Edition, for the Sacramento River Basin and the San Joaquin River Basin (hereafter Basin Plan), which designates beneficial uses, establishes water quality objectives for those beneficial uses, and establishes implementation programs and policies to achieve water quality objectives for all waters of the Basin. These requirements implement the Basin Plan.
31. 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 (SWRCB) 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) that contains guidance on implementation of the NTR and the CTR.
32. On 5 January 2001, the Discharger was issued a letter under the authority of CWC Section 13267 requiring effluent and receiving water monitoring to meet the data collection requirements of the SIP. The Discharger sampled Plant effluent and receiving water on four occasions to determine if the priority pollutants established in the CTR and NTR were detected. A listing of all priority pollutants in the NTR and CTR that were detected by the Discharger's sampling, and the water quality objective for the pollutant are presented in the Fact Sheet. This data was used to determine the necessity of including effluent limitations for priority pollutants in this permit.
33. The SIP also requires that the Discharger's effluent be tested at least once for all seventeen congeners of 2,3,7,8-substituted chloro dibenzo-dioxins and dibenzofurans. None of these congeners were detected in Plant effluent.

BENEFICIAL USES OF THE RECEIVING WATER

34. The Basin Plan on page II-2.00 states: “Existing and potential beneficial uses which currently apply to surface waters of the basins are presented in Figure II-1 and Table II-1. The beneficial uses of any specifically identified water body generally apply to its tributary streams.”
35. The Basin Plan does not specifically identify any beneficial uses for Spanish Creek and its tributaries. However, the Basin Plan does identify present and potential beneficial uses for the North Fork of the Feather River, to which Spanish Creek and Clear Stream are tributary.
36. The Basin Plan identifies the following beneficial uses for the North Fork of the Feather River: municipal and domestic supply (MUN); hydropower generation (POW); water contact recreation and canoeing and rafting (REC-1); non-contact recreation (REC-2); cold freshwater habitat (COLD); cold water spawning, reproduction, and/or early development (SPWN); and wildlife habitat (WILD).
37. The Basin Plan defines beneficial uses and with respect to disposal of wastewaters states that “...disposal of wastewaters is [not] a prohibited use of waters of the State; it is merely a use which cannot be satisfied to the detriment of beneficial uses.” Upon review of the flow conditions, habitat values, and beneficial uses of Spanish Creek and its tributaries, the Regional Board finds that the beneficial uses identified in the Basin Plan for the North Fork of the Feather River are applicable to Spanish Creek and its tributaries, including Clear Stream, based upon the following:

a. Municipal and Domestic Supply

The Regional Board is required to apply the beneficial uses for municipal and domestic supply to Spanish Creek and its tributaries based on SWRCB Resolution No. 88-63 which was incorporated into the Basin Plan pursuant to Regional Board Resolution No. 89-059. The State Water Resources Control Board (SWRCB) has issued water rights to water users along Spanish Creek for multiple uses including domestic and agricultural supply. Domestic water supply in the Quincy area is generally provided by Discharger and EQCSD using groundwater and springs. Although the use of Spanish Creek and its tributaries as domestic supply is limited, the potential for expanded use exists.

b. Hydropower Generation

Although Regional Board staff found no records of existing hydropower generation use for Spanish Creek and its tributaries, this use does exist in the North Fork of the Feather River; there are numerous dams generating hydroelectric power on the North Fork of the Feather River, beginning at the confluence of Indian and Spanish Creeks, and continuing on to Oroville Dam. This use depends on the presence of flow from tributary streams and therefore is protected by including it as a beneficial use in streams tributary to the North Fork of the Feather River. Furthermore, considering the likely future value of electricity generation, it is

not unreasonable to expect that new technologies for small hydropower projects may make hydropower generation uses on Spanish Creek or its tributaries desirable.

c. Water Contact and Noncontact Recreation

The Regional Board finds that Spanish Creek and its tributaries flow through rural and residential areas and that there is ready public access to Spanish Creek. Contact and noncontact recreational activities, including rafting, fishing, and others, exist and are likely to increase as the population in the area increases. Prior to discharge into the North Fork of the Feather River, Spanish Creek flows through areas of general public access.

d. Cold Freshwater Habitat, Migration of Aquatic Organisms, Spawning, Reproduction, and/or Early Development, and Wildlife Habitat

Spanish Creek flows to the North Fork of the Feather River. Fish species present in Spanish Creek and its tributaries are consistent with cold-water fisheries. The California State Department of Fish and Game plants catchable trout in Spanish Creek annually. In addition, native juvenile trout have been noted in Spanish Creek, as has potential presence of spawning areas. The Basin Plan (Table II-1) designates the North Fork of the Feather River as having a cold habitat. Therefore, pursuant to the Basin Plan (Table II-1, Footnote (2)), the COLD designation and Spawning, Reproduction, and/or Early Development, and Wildlife Habitat (SPWN) designation applies to Spanish Creek and its tributaries. The cold-water habitat designation necessitates that the in-stream dissolved oxygen concentration be maintained at, or above, 7.0 mg/L.

The riparian areas along Spanish Creek and its tributaries support wildlife habitat. Therefore, the wildlife habitat designation (WILD) applies to Spanish Creek.

38. Based on hydraulic continuity, existing and potential water rights, the potential for hydroelectric power generation, the presence of contact recreational activities, aquatic life migration, potential spawning and reproduction, and the presence of nearby wildlife habitat, the beneficial uses of the North Fork of the Feather River apply to Spanish Creek and its tributaries.
39. The beneficial uses of groundwater are municipal and domestic water supply, agricultural supply, industrial service supply, and industrial process supply.

EFFLUENT LIMITATIONS AND REASONABLE POTENTIAL

40. Effluent limitations, and toxic and pretreatment effluent standards established pursuant to Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 304 (Information Guidelines), and 307 (Toxic Pretreatment Effluent Standards) of the Clean Water Act (CWA), and amendments thereto, are applicable to the discharge.
41. Federal regulations contained in 40 CFR Part 122.44 (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 (reasonable potential). A Basin Plan standard is defined as the beneficial use and the water quality objective that will protect that beneficial use.

42. Determining reasonable potential for pollutants other than those contained in the CTR and NTR is accomplished by analyzing Plant operations, past effluent monitoring results, and other pertinent factors. In addition, the USEPA has provided guidance for the analysis of reasonable potential in their *Technical Support Document for Water Quality Based Toxics Control (TSD)*(EPA/505/2-90-101), which has been considered in this permit for developing effluent limitations for pollutants other than those in the CTR and NTR. For the determination of reasonable potential the TSD discusses consideration of a mixing zone (a zone surrounding the area of receiving water discharge where water quality objectives may not be met due to low dilution of effluent).
43. The 1Q10 flow for a stream is defined as the statistical value that represents a one-day low flow that has a recurrence frequency of 10 years. The 7Q10 flow is defined as the statistical value that represents the 7-day low flow that has a recurrence frequency of 10 years. In developing effluent limitations, the Basin Plan and the SIP allow for the usage of dilution credits (depending on the potential impact of a mixing zone to aquatic species that may move through the zone) at the point of effluent discharge to the receiving water. The 1Q10 and 7Q10 flows are used in establishing appropriate dilution credits for non-carcinogens. The harmonic mean flow is used when establishing effluent limitations for carcinogens.
44. There is minimal flow data for Spanish Creek during very high or very low flows. In April 2001, a staff gage with a continuous recorder was installed a few hundred yards upstream of the Plant outfall. To date the lowest flow recorded in Spanish Creek has been 4.3 cubic feet per second (cfs), on 16 August 2001. The highest flow has been recorded at 741 cfs, on 13 January 2003. The available information is inadequate to establish the 1Q10 and 7Q10, as precipitation has been near normal since the gage was installed.
45. This order requires the Discharger to determine the 1Q10 and 7Q10 flows in Spanish Creek, if they wish to be given dilution credit in for revised effluent limits, either by using a rational method and watershed area approach, by using current and future flow data from the gauging station, or a combination of both methods. This order also requires a study analyzing the dilution available at the outfall location if the Discharger moves the outfall location to Spanish Creek. The study also requires a determination of the necessity of installing an effluent outfall diffuser.
46. In consideration of the above beneficial use designations, potential available dilutions, and determination of reasonable potential, effluent limitations for the following non-priority pollutants have been established in this Order:

- a. *Total and Fecal Coliform Organisms*

In a letter to the Regional Board dated 8 April 1999, the California Department of Health Services indicated that DHS would consider wastewater discharged to water bodies with identified beneficial uses of irrigation, contact recreation, or a drinking water source to be

adequately disinfected if: 1) the wastewater receives dilution of more than 20:1; 2) the effluent coliform concentration does not exceed 23 MPN/100 mL as a 7-day median; and 3) the effluent coliform concentration does not exceed 240 MPN/100 mL more than once in any 30 day period. Municipal water supply is a beneficial use of Spanish Creek, as noted above. DHS recommends that samples be obtained for coliform at least twice per week if this coliform effluent limitation is used.

The effluent limit for total coliform in the previous Order was 23 MPN/100mL. That effluent limit is being retained in this Order. However, during the fall season, a 20:1 dilution of effluent in Spanish Creek may not be achievable, which could necessitate more stringent disinfection requirements. Upon completion of the Spanish Creek flow analysis and dilution study required by this Order, or upon a decision by the Discharger to continue discharge to Clear Stream, this permit may be reopened and a revised effluent limitation for coliform may be adopted.

- b. *Toxic compounds:* Aquatic habitat based upon the COLD designation is a beneficial use of Spanish Creek and its tributaries. The Basin Plan narrative toxicity standard requires that “All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.”
- *Chlorine*-The Discharger disinfects treated effluent with chlorine, which is toxic to aquatic organisms. The USEPA has developed recommended chlorine ambient water quality criteria to protect freshwater aquatic organisms. Their criterion is used in this Order to implement the narrative toxicity objective of the Basin Plan. The USEPA's ambient water quality criteria for total residual chlorine for protection of aquatic life are 11 ug/L as a 4-day average (chronic) concentration, and 19 ug/L as a one-hour average (acute) concentration. This permit contains effluent discharge limitations for total residual chlorine of 0.01 mg/L as a four-day average, and 0.02 mg/L as a maximum 1-hour average, based on the USEPA ambient criteria to protect aquatic life. 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.
 - *Ammonia*- Domestic wastewater treatment plants that do not nitrify (convert ammonia to nitrate) generally produce effluent with ammonia concentrations exceeding USEPA recommended freshwater criteria. Nitrification capability at the Plant is unknown and nitrification may not occur year-round, if at all, due to Quincy's cold climate. Therefore, there may be a reasonable potential for effluent ammonia to cause or contribute to an in-stream excursion above the Basin Plan narrative toxicity objective if there is inadequate mixing of effluent in Spanish Creek or if the effluent is discharged to Clear Stream. The USEPA has published revised ambient water quality criteria for ammonia (*1999 Ammonia Update*). This Order contains requirements for monitoring effluent ammonia, and a reopener to set ammonia effluent limitations if it is determined that ammonia in the effluent presents a

reasonable potential for exceedance of a water quality objective. If the Order is reopened, the Discharger may utilize effluent dilution information and mixing study results to apply for consideration of dilution credits in accordance with the Basin Plan.

c. Electrical Conductivity

The Basin Plan objective for electrical conductivity in the North Fork of the Feather River is 150 umho/cm (as the 90th percentile), although not explicitly related to a beneficial use. No data has been obtained in previous permit monitoring regarding electrical conductivity of effluent or receiving water. Prior to drafting this Order, electrical conductivity was measured three times in Spanish Creek by Discharger staff; the average value of the three samples was 86 umho/cm. Discharger staff also obtained samples of effluent for analysis of conductivity, and obtained readings ranging from 430 to 664 umho/cm. Although it has been determined that the beneficial uses of Spanish Creek and its tributaries are identical to those of the River, exceedance of the water quality objective for conductivity for the North Fork of the Feather River would not result in the impairment of Spanish Creek's beneficial uses. This Order prohibits the Discharger from discharging wastewater that results in an increase in conductivity in the North Fork of the Feather River above 150 umho/cm.

d. BOD and Total Suspended Solids

This permit contains effluent limits for BOD and total suspended solids (TSS). Federal regulations in 40 Code of Federal Regulations (CFR) Part 133 provide technology based effluent limitations for BOD and TSS for secondary treatment. Pursuant to the regulations at 40 CFR Parts 133.105(a), (b), and 133.103, the BOD and TSS 30-day average discharge limitations for secondary treatment shall not exceed 30 mg/L, the 7-day average shall not exceed 45 mg/L, and the 30-day BOD and TSS removal shall not be less than 85 percent.

e. pH

The Basin Plan requires that the pH of any receiving water not be greater than 8.5 nor lower than 6.5 units. The effluent pH has been measured at a low of 6.4 and a high of 7.3. The Federal Clean Water Act, Section 301, requires that not later than 1 July 1977, publicly owned wastewater treatment works meet effluent limitations based on secondary treatment or any more stringent limitation necessary to meet water quality standards. Federal Regulations, 40 CFR, Part 133, establish the minimum level of effluent quality attainable by secondary treatment for pH. There is a reasonable potential for the discharge to adversely affect the pH of Spanish Creek, by causing or contributing to receiving water pH exceedances, and effluent limitations have therefore been established.

47. The SIP provides the method for determining reasonable potential for priority pollutants defined in the NTR and CTR. The SIP does not allow a mixing zone for determination of reasonable potential, but does allow a mixing zone for determination of the effluent limitation.

48. The SIP establishes expected minimum levels (MLs) for each of the priority pollutants in the NTR and CTR. Water quality criteria have been established for forty-three of the volatile and semi-volatile organic priority pollutants, including pesticides, at concentrations less than current laboratory MLs.
49. For priority pollutants with MLs below their water quality objectives, there is no reasonable potential for an exceedance of a water quality objective in Spanish Creek, except for copper, lead, and silver (see Finding No. 51), based upon current analytical data (see the Fact Sheet), the nature of the domestic wastewater, and Plant operations. Therefore, no effluent limitations have been established for priority pollutants, except for copper, lead, and silver. Additional monitoring is required in Monitoring and Reporting Program No. R5-2004-0152 to assure that the basis of this finding remains unchanged.
50. For the 43 priority pollutants that have MLs established at concentrations higher than their water quality objectives, based on current Plant operations and the nature of the waste treated, these compounds should not be present in concentrations in the Plant effluent that cause or contribute to violations of water quality objectives. Therefore, no effluent limitations have been established for these pollutants. The *SIP* states that if “...all reported detection limits of the pollutant in the effluent are greater than or equal to the C [water quality criterion or objective] value, the RWQCB [Regional Board] shall establish interim requirements...that require additional monitoring for the pollutant...” Monitoring for these 43 constituents has been included in this Order in accordance with the SIP.
51. Based on analysis of effluent samples collected by the Discharger, and in accordance with the SIP (The most stringent water quality objectives for copper, silver, and lead are based upon potential aquatic toxicity, considering the receiving water is designated as COLD), the discharge may have a reasonable potential to cause or contribute to an in-stream excursion above the CTR standard for:
 - a. *Copper*: The Discharger submitted effluent results for copper ranging from 8 to 18.0 ug/L. Receiving water concentrations ranged from non-detectable to 6 ug/L at the laboratory’s minimum level of 6 ug/L. Copper toxicity is hardness dependant and the lowest detected (worst-case) hardness for the receiving water to date has been 24 mg/L. This hardness value was used to evaluate the possibility of reasonable potential because it is the lowest value recorded for both receiving water and effluent (resulting in the most conservative effluent limitation), and because hardness of the effluent will cause minimal increases in Spanish Creek hardness due to effluent dilution. Based on a hardness of 24 mg/L, the CTR receiving water standards are 2.7 ug/L as the Criterion Continuous Concentration, or CCC (chronic toxicity objective) and 3.5 ug/L as the Criterion Maximum Concentration, or CMC (acute toxicity objective). However, the CTR requires that the effluent limitations be adopted as total recoverable metals concentrations. The Ambient Water Quality Criteria for metals are presented as dissolved concentrations. Lacking site-specific conversion factors, USEPA recommends default conversion factors to translate dissolved concentrations to total recoverable concentrations. The conversion factors for copper in freshwater are 0.96 for both the acute and the chronic criteria. The value of 6 ug/L for copper measured in the

receiving water exceeds both the CCC and the CMC. Although only one out of four receiving water samples indicated an exceedance of a copper water quality objective, the presence of this elevated copper concentration indicates that the establishment of a dilution credit for copper may not be possible. Additional sampling for copper in Spanish Creek will be necessary to determine if dilution credits for copper are appropriate, and this additional sampling is required in Monitoring and Reporting Program No. _____.

- b. *Lead*: The Discharger submitted effluent results for lead ranging from non-detectable to 0.75 ug/L and receiving water concentrations ranging from non-detectable to 0.26 ug/L. Lead criteria are hardness dependent. The CTR standards at 24 mg/L hardness are 0.52 ug/L as the CCC and 13.3 ug/L as the CMC. The Ambient Water Quality Criteria for metals are presented as dissolved concentrations. As in the case of copper, lacking site-specific conversion factors, USEPA recommends default conversion factors to translate dissolved concentrations to total concentrations. Conversion factors for lead are dependant on water hardness. The conversion factor for lead in freshwater for a hardness of 24 mg/L is 0.999 for both the acute criteria and the chronic criteria.
 - c. *Silver*: The Discharger submitted effluent results for silver ranging from non-detected to 0.75 ug/L and receiving water concentrations all were non-detectable. Silver criteria are hardness dependent, similar to copper and lead. The CTR standard at a hardness of 24 mg/L is 0.30 ug/L as the CMC (there is no CCC for Silver). The Ambient Water Quality Criteria for metals are presented as dissolved concentrations. As in the case of copper and lead, lacking site-specific conversion factors, USEPA recommends default conversion factors to translate dissolved concentrations to total concentrations. The conversion factor for silver in freshwater is 0.85.
52. The Discharger submitted effluent results for bis(2-Ethylhexyl) phthalate ranging from non-detected to 3 ug/L and receiving water concentrations all non-detectable. The CTR standard is 5.9 ug/L as the CMC and 1.8 as the CCC. Bis(2-Ethylhexyl) phthalate is a common contaminant of sample containers, sampling apparatus, and analytical equipment, and it is therefore possible that the contaminant is not present in the receiving water or effluent discharge at the concentrations detected in the samples. This Order requires the Discharger to take steps to assure that sampling containers and apparatus are not the source of this contaminant. If changes in sampling and/or analytical procedures and equipment indicate that bis(2-Ethylhexyl) phthalate is not actually present in the effluent or receiving water samples at concentrations that trigger reasonable potential according to the SIP, then effluent limits are not necessary. If bis(2-Ethylhexyl) phthalate continues to be detected in the effluent and/or receiving water, then this Order may be reopened and modified to include an appropriate effluent limitation for bis(2-Ethylhexyl) phthalate.
53. Section 1.4 of the SIP establishes procedures for calculating effluent limitations. Included in the procedures is determination of a dilution credit, which the Regional Board may approve or disapprove at its discretion. However, the Discharger has not developed the information needed to determine a dilution credit. Consequently, this Order establishes a final effluent limitation based on zero dilution. The Order also has a reopener that allows new effluent limitations to be

adopted if a dilution study demonstrates that dilution credits are appropriate, and if the Discharger moves its discharge location from Clear Stream to Spanish Creek.

54. The compliance schedule gives the Discharger **60 months** to achieve compliance with the final effluent limitations for copper, lead, and silver, or to justify other final effluent limitations to be incorporated upon renewal or reopening of the permit. Because the compliance schedule exceeds one year, the SIP requires interim effluent limitations (Section 2.1 of the SIP). This Order therefore establishes interim effluent limitations for copper, lead, and silver effective upon adoption of the Order. The SIP, Section 2.2.1, states that interim effluent limitations must be based on “. . . *current treatment facility performance or on existing permit limitations, whichever is more stringent.*” Because there are no existing effluent limitations on copper, lead, or silver, the interim effluent limitations are based on current treatment facility performance (See Fact Sheet). This Order requires the Discharger to provide a compliance schedule and justification for interim limitations within eight months of adoption of this Order, if not submitted, the final effluent limitations become effective on that date.
55. When there are less than ten sampling data points available, the TSD recommends a coefficient of variation of 0.6 be utilized as representative of wastewater effluent sampling. The TSD recognizes that a minimum of ten data points is necessary to conduct a valid statistical analysis. The multipliers contained in Table 5-2 of the TSD are used to determine a maximum daily limitation based on a long-term average objective. In this case, the long-term average objective is to maintain, at a minimum, the current Plant performance level. Therefore, when there are less than ten sampling points for a constituent, interim limitations are based on 3.11 times the maximum observed sampling point to obtain the daily maximum interim limitation (TSD, Table 5-2). The Regional Board finds that the Discharger can undertake source control and Plant measures to maintain compliance with the interim limitations included in this Order. Interim limitations are established when compliance with NTR- and CTR-based Effluent Limitations cannot be achieved by the Plant utilizing its current operations. Discharge of constituents in concentrations in excess of the final Effluent Limitations, but in compliance with the interim Effluent Limitations, can significantly degrade water quality and adversely affect the beneficial uses of the receiving stream on a long-term basis. For example, USEPA states in the Ambient Water Quality Criteria for the Protection of Freshwater Aquatic Life for copper, that it will take an unstressed system approximately three years to recover from a pollutant in which exposure to copper exceeds the recommended criterion. The interim limitations, however, establish an enforceable ceiling concentration until compliance with the final effluent limitations can be achieved.
56. As stated in *Standard Provisions and Reporting Requirements, For Waste Discharge Requirements, 1 March 1991, General Provisions, No. 13*, this Order prohibits bypass from any portion of the treatment facility. Federal Regulations, 40 CFR 122.41 (m), define “bypass” as the intentional diversion of waste streams from any portion of a treatment facility. This section of the Federal Regulations, 40 CFR 122.41 (m)(4), prohibits bypass unless it is unavoidable to prevent loss of life, personal injury, or severe property damage. In considering the Regional Board’s prohibition of bypasses, the State Water Resources Control Board adopted a precedential decision, Order No. WQO 2002-0015, which cites the Federal Regulations,

40 CFR 122.41(m), as allowing bypass only for essential maintenance to assure efficient operation. In the case of *United States v. City of Toledo, Ohio* (63 F. Supp 2d 834, N.D. Ohio 1999) the Federal Court ruled “*any bypass which occurs because of inadequate plant capacity is unauthorized...to the extent that there are ‘feasible alternatives’, including the construction or installation of additional treatment capacity.*”

57. These requirements prohibit the discharge of effluent to Spanish Creek between 16 May and 31 October. Exceptions to this prohibition may be granted by the Executive Officer during emergency circumstances, if the Discharger has previously undertaken a program of adequate maintenance, flow reduction, improved disinfection, and toxicity reduction (See Effluent Prohibition A.3.).
58. In accordance with the SIP, Section 1.4, and Discharger CTR monitoring data, compliance with CTR criteria for copper, lead, and silver can only be achieved with dilution of the effluent in Spanish Creek (considering current effluent concentrations of these pollutants). The actual amount of necessary dilution cannot be estimated unless the Discharger obtains more information regarding: 1) flows in Spanish Creek; 2) ambient metal concentrations; and 3) available mixing in the Creek, as required in this Order if the Discharger decides to move the discharge location to Spanish Creek. Subsequent to the dilution, flow measurement, and ambient water quality studies, this permit may be re-opened; if the permit is reopened modified final effluent limitations will be established for copper, silver, and lead.
59. This Order contains provisions and monitoring program requirements that require the Discharger to conduct additional sampling to provide information on the concentrations of all priority pollutants in the discharge.
60. Section 13263.6(a), CWC, requires that “the regional board shall prescribe effluent limitations as part of the waste discharge requirements of a POTW [Publicly Owned Treatment Works] 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) (EPCCKA) 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.”
61. Review of the available toxic release reporting data for 1998 through 2003 did not reveal any release of toxic chemicals to the Plant. An interview with the Plant Manager corroborated this review. Therefore, under the requirements of EPCCKRA, there is no requirement for setting of effluent limitations for any toxic chemical regulated in accordance with this section of the Water Code.

COMPLIANCE WITH STATE AND FEDERAL POLICIES REGARDING WATER QUALITY DEGRADATION

62. The permitted discharge is consistent with the anti-degradation provisions of 40 CFR Part 131.12 and with SWRCB Resolution 68-16 (Policy with Respect to Maintaining High Quality Water of Waters in California). Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. The impact on existing water quality will be insignificant.

SEWER SYSTEM OVERFLOW PREVENTION

63. The Discharger's sanitary sewer system collects wastewater using sewers, gravity and pressure piping, pumps, and/or other conveyance systems and directs this raw sewage to the 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.
64. A "sanitary sewer overflow" is defined as a discharge to the ground surface or surface water from the sewer system at any point upstream of the Plant.
65. The potential causes of sanitary sewer overflows that may affect this sewer system include grease blockages, root blockages, debris blockages, air relief/vacuum valve failures, vandalism, storm or groundwater inflow/infiltration, snow melt infiltration, lift station pump failure or blockage, and lack of capacity, both hydraulic capacity of the sewer and pumping station capacity. Sanitary sewer overflows pose a threat to public health, may adversely affect aquatic life, and may impair the recreational use and aesthetic enjoyment of surface waters in the area.
66. Adequate steps must be taken to maintain and operate the sewer system and prevent sewer system overflows. This Order requires the Discharger to prepare and implement sewer system operation, maintenance, overflow prevention, and overflow response plans for the sewer collection system.

MANAGEMENT OF STORM WATER

67. The USEPA, on 16 November 1990, promulgated storm water regulations (40 CFR Parts 122, 123, and 124) that require specific categories of industrial facilities which discharge storm water to obtain NPDES permits and to implement Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology to reduce or eliminate industrial storm water pollution.
68. On 17 April 1997, the SWRCB adopted Order No. 97-03-DWQ (General Permit No. CAS000001), specifying waste discharge requirements for discharge of storm water

associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent by industries covered under the permit. The provisions of this Order require the Discharger to obtain an Industrial Storm Water permit.

**COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT,
NOTIFICATION REQUIREMENTS, AND MISCELLANEOUS**

69. Monitoring is required by this Order for the purposes of assessing compliance with permit limitations and water quality objectives and gathering information to evaluate the need for additional limitations.
70. Section 13267 of the California Water Code 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. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. The attached Monitoring and Reporting Program is issued pursuant to California Water Code Section 13267. The monitoring and reporting program required by this Order and the attached Monitoring and Reporting Program are necessary to assure compliance with these waste discharge requirements. The Discharger is responsible for the discharges of waste at the facility subject to this Order.
71. Section 2.1 of the SIP provides that: “Based on an existing discharger’s request and demonstration that it is infeasible for the discharger to achieve immediate compliance with a CTR criterion, or with an effluent limitation based on a CTR criterion, the RWQCB may establish a compliance schedule in an NPDES permit.” Section 2.1 further states that compliance schedules may be included in NPDES permits provided that the following justification has been submitted... ”(a) documentation that diligent efforts have been made to quantify pollutant levels in the discharge and the sources of the pollutant in the waste stream; (b) documentation of source control and/or pollution minimization efforts currently underway or completed; (c) a proposal for additional or future source control measures, pollutant minimization actions, or waste treatment (i.e., facility upgrades); and (d) a demonstration that the proposed schedule is as short as practicable.” This Order establishes a compliance schedule and requires the Discharger to provide this information.
72. 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. R5-2004-0152 and Attachments A through G are a part of this Order.
73. The action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.), in accordance with Section 13389 of the CWC. The Plant is also an existing facility, which exempts it from CEQA.

74. The Regional 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.
75. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.
76. 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 the USEPA has no objections.

IT IS HEREBY ORDERED that Order No. 99-020 is rescinded, and the Quincy Community Services District, their 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 CWA and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The discharge of effluent at a location or in a manner different from that described in the Findings.
2. Discharge to Spanish Creek, directly or via Clear Creek, is prohibited between **16 May and 31 October**.
3. Exceptions to Discharge Prohibition A.2. may be granted by the Executive Officer provided all the following conditions are satisfied:
 - a. The Discharger demonstrates in a report to Regional Board staff that the potential impacts of non-discharge would be greater than discharge, including any potential property damage, or interference with the wastewater treatment process. Impact of non-discharge to be analyzed must include as a minimum, damage to treatment processes or structures, and potential damage to nearby property should a breach in any of the ponds occur;
 - b. The Discharger has previously taken all practicable steps to prevent the discharge and all required maintenance is current. Proof that all reasonable steps have been taken to prevent the discharge shall include a schedule for operation of the irrigation and emergency storage pond;
 - c. The Discharger has established appropriate flow minimization programs and toxicity reduction programs. These programs shall include, as a minimum, an approved I/I reduction program, a public education program for water conservation,

and a public education program regarding appropriate use and disposal of household and garden chemicals;

- d. The Discharger institutes a program for enhanced disinfection, with the goal of meeting an effluent median coliform value of 2.2 MPN/100 mL. The enhanced disinfection program shall include as a minimum an approved plan for additional chlorine dosing, improved chlorine mixing at the dosing point, and appropriate cleaning of the contact chambers to assure maximum residence time and elimination of solids that may be entrained into the effluent stream, causing chlorine demand and reducing efficiency of disinfection;
- e. The discharge will not result in the exceedance of any water quality objective in Spanish Creek or Clear Stream.

All of the above programs, reports, and schedules shall be approved by Regional Board staff prior to consideration of discharge during the recreational season. Approval for discharge during the recreational season must be obtained in writing from the Regional Board Executive Officer.

- 4. The by-pass or overflow of wastes, except as allowed by Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES) A.13, is prohibited.
- 5. Discharge of materials, other than storm water, that are not otherwise permitted by this Order to surface waters or surface water drainage courses is prohibited.

B. Effluent Limitations

- 1. The effluent discharge to Spanish Creek or Clear Stream shall not exceed the following limitations:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Median</u>	<u>Daily Maximum</u>	<u>Hourly Average</u>	<u>4-day Average</u>
BOD ¹	mg/L lbs/day ²	30 400	45 600	-- --	90 1201	--	--
Total Suspended Solids	mg/L lbs/day ²	30 400	45 600	-- --	90 1201	--	--
Chlorine Residual ³	mg/L	--	--	--	--	0.02	0.01
Total Coliform Organisms ^{3,4}	MPN/ 100 mL	--	--	23	500	--	--
Copper (Total Recoverable) ⁵	ug/L lbs/day	1.8 ⁶ 0.024 ⁷	--	--	3.6 ⁶ 0.048 ⁸	--	--

WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2004-0152
 QUINCY COMMUNITY SERVICES DISTRICT
 WASTEWATER TREATMENT PLANT AND COLLECTION SYSTEM
 PLUMAS COUNTY

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Median</u>	<u>Daily Maximum</u>	<u>Hourly Average</u>	<u>4-day Average</u>
Lead (Total Recoverable) ⁵	ug/L lbs/day	0.42 ⁶ 0.0056 ⁷	--	--	0.85 ⁶ 0.011 ⁸	--	--
Silver (Total Recoverable) ⁵	ug/L lbs/day	0.17 ⁶ 0.0023 ⁷	--	--	0.35 ⁶ 0.0047 ⁷	--	--

¹ 5-day, 20°C biochemical oxygen demand

² Based upon a design treatment capacity of 1.6 mgd.

³ Chlorine residual and total coliform shall be measured at the chlorine contact chamber discharge or other location approved by the Executive Officer. Effluent chlorine residual shall be measured continuously.

⁴ The effluent coliform sample shall be taken during the period when the highest daily effluent flow occurs.

⁵ These limitations shall take effect **8 months after adoption of this Order**, unless the Discharger submits a compliance schedule pursuant to Provision H.10. If the compliance schedule is submitted in accordance with this provision, and approved by the Executive Officer, the effluent limitations shall take effect 60 months after adoption of this Order. In the interim period, effluent limitation shown in B. 2, will apply.

⁶ These limitations are derived for a receiving water hardness of 24 mg/L (See attachment C). For any other receiving water hardness, refer to Attachments D through F.

⁷ Limitations are based upon a design flow of 1.6 MGD.

2. The effluent discharge to Spanish Creek or Clear Stream shall not exceed the following interim limitations. The interim limitations may supercede the above final limitations as described in this Order in accordance with Provision H.11:

<u>Constituents</u> (Total Recoverable)	<u>Daily Maximum¹</u>		<u>Monthly Average¹</u>	
	<u>Concentration</u> (µg/L)	<u>Mass² (lbs/day)</u>	<u>Concentration</u> (µg/L)	<u>Mass² (lbs/day)</u>
Copper	56	0.75	18.0	0.24
Lead	2.2	0.029	0.70	0.0093
Silver	2.3	0.031	0.75	0.010

¹ See Fact Sheet for derivation of these limitations.

² Based on a design treatment capacity of 1.6 mgd.

3. The effluent discharge to the Leonhardt Ranch shall not exceed the following limitations:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Median</u>	<u>Daily Maximum</u>	<u>Hourly Average</u>	<u>4-day Average</u>
BOD ¹	mg/L lbs/day ²	30 400	45 600	-- --	90 1201	--	--
Total Suspended Solids	mg/L lbs/day ²	30 400	45 600	-- --	90 1201	--	--
Total Coliform Organisms ³	MPN/ 100mL	--	--	23	500	--	--

¹ 5-day, 20°C biochemical oxygen demand.

² Based upon a design treatment capacity of 1.6 mgd.

³ Chlorine residual and total coliform shall be measured at the chlorine contact chamber discharge. The effluent coliform sample shall be taken during the period of highest daily effluent flow.

4. The arithmetic mean BOD in effluent samples collected over a monthly period shall not exceed 15 percent of the arithmetic mean of the values for influent samples (85 percent removal).
5. The discharge shall not have a pH less than 6.0 nor greater than 9.0 units.
6. The 30-day average daily dry weather discharge flow to Spanish Creek or Clear Stream shall not exceed 1.60 million gallons.
7. The peak wet weather discharge flow to Spanish Creek or Clear Stream shall not exceed 4.9 mgd.
8. Survival of test fishes in 96-hour bioassays of undiluted effluent shall be no less than:

Minimum for any one bioassay - - - - - 70%

Median for any three or more bioassays- - - - - 90%

unless the Discharger submits a report demonstrating that the allowance of an acute toxicity mixing zone is appropriate. If such a demonstration is made, this permit will be reopened and new effluent acute toxicity limitations will be adopted.

9. The Discharger shall use the best practicable cost-effective control technique currently available to limit mineralization of Spanish Creek and Clear Stream to no more than a reasonable increment.

C. Discharge Specifications

1. Objectionable odors originating at the Plant shall not be perceivable beyond the property.
2. Ponds shall be managed to prevent breeding of mosquitoes. In particular:
 - a. An erosion control program shall assure that small coves and irregularities are not created around the perimeter of the water surface;
 - b. Weeds shall be minimized;
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
3. The Discharger shall maintain a minimum two feet of freeboard in all ponds at all times. Freeboard shall be measured vertically from the lowest elevation of the pond berm to the pond water surface.
4. The ponds shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation and I/I. Design seasonal precipitation shall be based on total

annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.

5. On or about **1 October** of each year, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specification 4. By **15 October** of each year the Discharger shall submit confirmation that the ponds have adequate capacity.
6. Public contact with wastewater shall be precluded to the best practicable extent possible through such means as fences, signs, and other acceptable alternatives
7. The discharge to the ponds shall not cause degradation of any water supply.
8. Neither the discharge nor its treatment shall create a nuisance as defined in Section 13050 of the California Water Code.

D. Sludge Disposal Requirements

1. Collected screenings, sludge, 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 Part 503.
4. If the SWRCB and the Regional Boards are given the authority to implement regulations contained in 40 CFR Part 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 Part 503 whether or not they have been incorporated into this Order.
5. By **30 January of each year**, the Discharger shall submit a sludge disposal plan describing the annual volume of sludge generated by the Plant and specifying their disposal practices. Refer to the Monitoring and Reporting Program for additional information on the required monitoring and reporting for sludge.

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 Spanish Creek, Clear Stream, or the North Fork of the Feather River:

1. Electrical conductivity to exceed 150 umhos/cm (for the North Fork of the Feather River only).
2. Concentration of dissolved oxygen to fall below 7.0 mg/L. The monthly median of the mean daily dissolved oxygen concentration shall not fall below 85 percent of saturation in the main water mass, and the 95th percentile concentration shall not fall below 75 percent of saturation.
3. Oils, greases, waxes, or other materials to form a visible film or coating on the water surface or on the stream bottom.
4. Oils, greases, waxes, floating material (liquids, solids, foams, and scums), or suspended material to create a nuisance or adversely affect beneficial uses.
5. Aesthetically undesirable discoloration.
6. Fungi, slimes, or other objectionable growths.
7. 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.

In determining compliance with the above limitations, appropriate averaging periods may be applied upon approval by the Executive Officer.

8. The normal ambient pH to fall below 6.5, exceed 8.5, or change by more than 0.5 units. In determining compliance with the above limitations, appropriate averaging periods may be applied upon approval by the Executive Officer.
9. Deposition of material that causes nuisance or adversely affects beneficial uses.
10. The normal ambient temperature to be altered by more than 5°F.
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. 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.
14. 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 the samples taken in any 30-day period to exceed 400 MPN/100 mL.
15. 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.
16. Violations of any applicable water quality standard for receiving waters adopted by the Regional Board or the SWRCB pursuant to the CWA and regulations adopted thereunder.

F. Groundwater Limitations

Release of waste constituents from any storage, treatment, or disposal component associated with the Plant, in combination with other sources of waste constituents, shall not cause the following in groundwater:

1. Beneficial uses to be unreasonably affected, water quality objectives to be exceeded, or cause a condition of pollution or nuisance.
2. Any increase in total coliform organisms to exceed 2.2 MPN/100 mL over any seven-day period.

G. Pretreatment Program Provisions

1. The Discharger shall implement, as more completely set forth in 40 CFR 403.5, the necessary legal authorities, programs, and controls to ensure that the following incompatible wastes are not introduced to the treatment system where incompatible wastes are:
 - a. Wastes which create a fire or explosion hazard in the treatment works;
 - b. Wastes which will cause corrosive structural damage to treatment works, but in no case wastes with a pH lower than 5.0, unless the works is specially designed to accommodate such wastes;

- c. Solid or viscous waste in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation or treatment works;
 - d. Any waste, including oxygen demanding pollutants (BOD, etc.), released in such volume or strength as to cause inhibition or disruption in the treatment works, and subsequent treatment process upset and loss of treatment efficiency;
 - e. Heat in amounts that inhibit or disrupt biological activity in the treatment works, or that raise influent temperatures above 40°C (104°F), unless the treatment works is designed to accommodate such heat;
 - f. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
 - g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the treatment works in a quantity that may cause acute worker health and safety problems; and
 - h. Any trucked or hauled pollutants, except at points predesignated by the Discharger.
2. The Discharger shall implement, as more completely set forth in 40 CFR 403.5, the legal authorities, programs, and controls necessary to ensure that indirect discharges do not introduce pollutants into the sewage system that either alone or in conjunction with a discharge or discharges from other sources:
 - a. Flow through the system to the receiving water in quantities or concentrations that cause a violation of this Order, or
 - b. Inhibit or disrupt treatment processes, treatment system operations, or sludge processes, use, or disposal and either cause a violation of this Order or prevent sludge use or disposal in accordance with this Order.
 3. The Discharger shall notify industrial users, subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N, of their discharge effluent limitations. The limitations must be at least as stringent as the pretreatment standards contained in the applicable federal category. The Discharger may develop more stringent technically based local limits if it can show cause. The Discharger shall notify the Regional Board if an industrial user violates its discharge effluent limitations to the collection system.

H. Provisions

1. The existing treatment facilities shall be operated and maintained to prevent inundation or washout due to floods with a 100-year return frequency. New facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

2. 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, groundwater, cooling waters, and condensates that are essentially free of pollutants.
3. The Discharger shall conduct the acute toxicity testing specified in Monitoring and Reporting Program No. R5-2004-0152. If the testing indicates that the discharge causes unacceptable exceedances of the acute toxicity effluent limitation or water quality objective, the Discharger shall submit a workplan to conduct a Toxicity Reduction Evaluation (TRE) **within 90 days of that determination** and upon Executive Officer review conduct the TRE **within 180 days**. After completion of the TRE this Order will be reopened and a toxicity limitation included and/or a limitation for the specific toxicant identified in the TRE included.
4. The Discharger shall conduct the chronic toxicity testing specified in Monitoring and Reporting Program No. R5-2004-0152. 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 submit a workplan to conduct a Toxicity Reduction Evaluation (TRE) **within 90 days of that determination** and upon Executive Officer review conduct the TRE **within 180 days**, and this Order will be reopened and a 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 SWRCB, this Order may be reopened and a limitation based on that objective included.
5. When requested by USEPA, the Discharger shall complete and submit Discharge Monitoring Reports. The submittal date shall be no later than the submittal date specified in the Monitoring and Reporting Program for Discharger Self-Monitoring Reports.
6. The Discharger shall provide certified wastewater treatment plant operators in accordance with regulations adopted by the SWRCB.
7. The Discharger shall comply with the attached Monitoring and Reporting Program No. R5-2004-0152, which is a part of this Order, and any revisions thereto as ordered by the Executive Officer.
8. Within **30 days** of the adoption of this Order, the Discharger shall:
 - a. Provide the name and grade of the primary Plant operator. **Fifteen days prior** to any change in the Operations and Maintenance Manual (O&M Manual) or primary Plant operator, the Discharger shall notify the Regional Board. The Discharger shall certify in writing that the new primary Plant operator is familiar with the O&M Manual and this Order **within fifteen days** of the change of primary Plant operator.
 - b. Apply for coverage under the general industrial storm water permit. The application for this permit includes the development of a Storm Water Pollution Prevention Plan.

- c. Notify the SWRCB of the 1,000-gallon diesel fuel tank at the Plant and pay the appropriate above ground storage tank fee.

9. **Within 180 days of the adoption of this Order**, the Discharger shall:

- a. Remove any sludge stored on site and transport the sludge to an approved disposal site; or 2) submit a report of waste discharge proposing a method of sludge management on-site that complies with State and Federal regulations;
- b. Submit 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:

- i. Plans of the sewer system, identifying sewer mains, manholes, cleanouts, any air relief valves, and any other specific critical equipment or infrastructure;
- ii. A listing of equipment and elements to be inspected, a description of inspection procedures and inspection frequency, and sample inspection forms;
- iii. 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;

At a minimum, the Overflow Prevention and Response portion of the SSS Plan shall contain or describe the following:

- i. 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
- ii. A plan to notify the Plumas 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 Plumas 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.

- c. Submit a plan for Plant influent flow reduction, toxicity minimization, and improved disinfection if the Discharger desires to take advantage of the ability to discharge to Spanish Creek during Plant emergencies occurring during a seasonal prohibition period.
- d. Submit an estimate of the 1Q10 and 7Q10 flows in Spanish Creek. The estimate shall be based upon the rational method, and shall take into account the potential variations in flows caused by snowmelt. The estimate shall be prepared by an appropriate professional such as a hydrologist or California registered civil engineer.
- e. Submit a report analyzing the dilution available at the discharge point, and how this dilution may be used for establishment of dilution credits in accordance with the Basin Plan and the SIP. The report shall address whether an effluent outfall diffuser in Spanish Creek is necessary.
- f. Submit a report discussing the concentrations of copper, silver, and lead found in Spanish Creek and in the effluent if the Discharger decides to apply for dilution credits. The Report must include additional sampling, and, along with the dilution study determine if dilution credits may be allowable for a copper, silver, or lead effluent limitation.
- g. In accordance with Sections 60301 through 60355 of the California Code of Regulations, submit a Title 22 Engineering report for the discharge of recycled wastewater to the Leonhardt Ranch.
- h. Establish an electronic system for operator notification for continuous recording device alarms. For systems installed following permit adoption, the notification system shall be installed simultaneously.

All of the above reports or plans shall be prepared and submitted by a California registered civil engineer, unless otherwise noted.

After these studies are completed, if the Regional Board determines that dilution credits are appropriate for copper, silver, or lead, this Order will be reopened and revised final effluent limitations will be considered. If the report on dilution indicates that an effluent outfall diffuser is necessary to provide dilution credits, the Discharger will be given **2 years** from the date of report submittal for its installation.

10. Within eight months of the adoption of this Order, the Discharger shall:

- a. Submit a compliance schedule and justification for interim copper, lead, and silver effluent limitations. The compliance schedule and justification shall include proposed submittal dates for all items specified by the SIP in Section 2.1, Paragraph 3 (items (a)

- through (d)). If a compliance schedule and justification for interim limitations meeting the requirements of Section 2.1 of the SIP is not submitted by the Discharger by the required date, the final effluent limitations for copper, lead, and silver become effective on that date. The compliance justification schedule shall include the proposed submittal of semi-annual reports regarding the Discharger's progress in complying with the final effluent limitations.
- b. Submit a plan for the potential modifications to the effluent discharge point, described in Finding No. 9, if the Discharger wishes to apply for dilution credits for the discharge. The plan must include milestones for completion of modifications within 5 years of adoption of this Order. The plan shall be updated every **6 months**. Any areas that are proposed for use as wetlands, storage, or pools, that have received wastewater treatment plant sludge must have that sludge tested for the presence of hazardous wastes. The Discharger must submit a sampling plan for any such area with adequate time for Regional Board staff review and for conformance with the deadlines for compliance with effluent limitations. If the Discharger decides not to modify the effluent discharge point, as described in Finding No. 9, a plan for meeting effluent limitations without the use of dilution credits must be submitted **within 365 days of adoption of this Order**. The plan must include deadlines for performing pollutant reduction studies, a public education program to minimize pollutant discharge, and an analysis of enhanced treatment for pollutant removal. The plan must demonstrate that the Discharger will be able to comply with final effluent limitation within 60 months of the adoption of this order.
11. If any of the reports required by Provisions H.9.d., e., and f. and H.10. are not submitted by the dates specified, the final effluent limitations for copper, lead, and silver become effective on that respective date(s). Otherwise, unless this Order is administratively extended and unless in renewing or reopening this Order the final effluent limitations are modified, the final water quality based effluent limitations for copper, silver, and lead become effective **60 months after adoption of this Order**.
12. **Within one year of the adoption of this permit**, the Discharger shall use the data collected in accordance with Monitoring and Reporting Program No. R5-2004-0152, and the dilution information required in Provision H.9.d. and e. to determine if the discharge of ammonia or total dissolved solids have a reasonable potential to cause toxicity to aquatic organisms in the receiving water, or otherwise cause exceedance of any water quality objective, including electrical conductivity, in the North Fork of the Feather River. If reasonable potential is determined for ammonia or total dissolved solids, this Order will be reopened and effluent limitations adopted.
13. If monitoring of priority pollutants required in Monitoring and Reporting Program No. R5-2004-0152 indicates that additional priority pollutants (in addition to copper, lead, and silver) may have reasonable potential to cause or contribute to an in-stream excursion above a water quality standard, including Basin Plan numeric and narrative objectives or NTR and CTR criteria, the Regional Board will utilize the additional data and the dilution information required by Provision H.9.e. and f. to determine whether reasonable potential

exists. If reasonable potential is determined for any additional pollutant, the Regional Board will reopen this Order and include effluent limitations for those pollutants.

14. To verify whether bis(2-Ethylhexyl) phthalate is truly present in the receiving water or effluent, the Discharger shall take steps to assure that sample containers, sampling apparatus, and analytical equipment are not sources of the detected contaminant. If changes in sampling and/or analytical procedures and equipment indicate that bis(2-Ethylhexyl) phthalate is not present in the effluent or receiving water samples at concentrations that cause reasonable potential as defined by the SIP, then effluent limits are not necessary. If bis(2-Ethylhexyl) phthalate continues to be detected in the effluent and/or receiving water, then this Order will be reopened and modified by adding an appropriate effluent limitation for bis(2-Ethylhexyl) phthalate.
15. The Discharger shall report to the Regional Board **within 15 days** any toxic chemical release data it reports to the State Emergency Response Commission pursuant to Section 313 of the "Emergency Planning and Community Right to Know Act of 1986."
16. The Discharger shall comply with all the items of the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES)," dated 1 February 2004, which are a part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provision(s)."
17. The Discharger may be required to submit technical reports as directed by the Executive Officer.
18. This Order expires on **1 October 2009**, and the Discharger must file a ROWD in accordance with Title 23, CCR, not later than **180 days** in advance of such date as application for issuance of new waste discharge requirements.
19. Prior to making any change in the discharge point, place of use, or purpose of use of the effluent the Discharger shall obtain approval of, or clearance from, the SWRCB, Division of Water Rights.
20. 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.
21. 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 Regional 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 15 October 2004.

THOMAS R. PINKOS
Executive Officer

RSD: sae

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2004-0152

NPDES NO. CA CA0078981

FOR

QUINCY COMMUNITY SERVICES DISTRICT
WASTEWATER TREATMENT PLANT AND COLLECTION SYSTEM
PLUMAS COUNTY

This Monitoring and Reporting Program (MRP) is issued pursuant to California Water Code Sections 13267 and 13383 and describes requirements for monitoring domestic wastewater, treated effluent, and receiving water. The Discharger shall not implement any changes to this MRP unless and until the Regional Board or Executive Officer approves such changes. Regional Board staff shall approve specific sample station locations prior to implementation of sampling activities.

All samples shall be representative of the volume and nature of the discharge or material sampled. The time, date, and location of each sample shall be recorded on a chain of custody form for the sample.

All water quality sampling and analyses shall be performed in accordance with the Monitoring and Reporting Requirements as outlined in the Standard Provisions of this Order. Water quality sample collection, storage, and analyses shall be performed according to 40 CFR Part 136, or other methods approved and specified by the Executive Officer. Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health Services (DHS), except when a certified laboratory is not reasonably available to the Discharger, in which case a non-certified laboratory operating in compliance with an approved Quality Assurance-Quality Control program may be used.

Field test instruments (such as those used to test pH, dissolved oxygen, or other constituents amenable to such instrumentation) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are calibrated in accordance with the manufacturers recommendations and the method has been accepted by Regional Board Staff;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of this MRP.

INFLUENT MONITORING

Samples shall be representative of the influent for the period sampled. The following shall constitute the influent monitoring program:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Flow	mgd	Meter	Continuous
BOD	mg/L, lbs/day	24-Hr. Composite	Weekly
Total Suspended Solids	mg/L, lbs/day	24-Hr. Composite	Weekly

POND MONITORING

The Discharger shall record the following for all ponds (stabilization/polishing ponds, irrigation pond, and emergency storage pond):

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Liquid Depth and Freeboard	Feet	Visual/Measurement	Monthly
Seepage through pond dikes	Presence/Absence	Visual	Monthly
Excessive odors or other nuisances	Presence/Absence	Observation	Monthly
Excessive weed growth in pond	Presence/Absence	Visual	Monthly

EFFLUENT MONITORING

Effluent monitoring shall be conducted during discharge to Spanish Creek (or discharge to Clear Stream if Clear Stream is discharging to Spanish Creek at that time), and analyses performed as indicated below. Samples collected from the outlet structure of ponds will be considered adequately composited. The time of collection of grab samples shall be recorded.

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Chlorine	mg/L	Flow through	Continuous
pH	pH Units	Grab	Daily
Flow	MGD	Cumulative	Daily
BOD	mg/L, lbs/day	Grab	Weekly
Total Suspended Solids	mg/L, lbs/day	Grab	Weekly
Temperature	°F	Grab	Weekly
Total Coliform ¹	MPN/100 mL	Grab	Weekly
Ammonia Nitrogen ^{2,3}	mg/L, lbs/day	Grab	Monthly
Electrical Conductivity	umho/cm	Grab	Monthly ⁴

MONITORING AND REPORTING PROGRAM NO. R5-2004-0152
 QUINCY COMMUNITY SERVICES DISTRICT
 WASTEWATER TREATMENT PLANT AND COLLECTION SYSTEM
 PLUMAS COUNTY

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Copper	ug/L	Grab	Monthly ⁴
Total Lead	ug/L	Grab	Monthly ⁴
Total Silver	ug/L	Grab	Monthly ⁴
Dissolved Oxygen	mg/L	Grab	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly ⁴
Nitrate Nitrogen	mg/L, lbs/day	Grab	Quarterly
TKN	mg/L, lbs/day	Grab	Quarterly
Acute Toxicity ⁵	% Survival	---	Twice per year
Chronic Toxicity ⁶	---	---	One time in the permit cycle
Priority Pollutants ⁷	---	Grab	As described below
Total Phosphorus	mg/L	Grab	Annually
Oil and Grease	mg/L	Grab	Annually

¹ Coliform samples shall be obtained during the peak hourly flow for the day.

² Concurrent with biotoxicity monitoring.

³ Report as both total and un-ionized ammonia.

⁴ Samples for these constituents shall be obtained at least quarterly for the first year, whether or not discharge to the Creek is occurring, and monthly during times of discharge to Spanish Creek (directly or via clear stream). If no creek discharge is occurring when the sample is due to be obtained, the sample shall be obtained downstream of the chlorine contact chamber. After the first year, monitoring will be required monthly, and only when discharge to Spanish Creek occurs (directly or via Clear Stream).

⁵ The acute bioassay samples shall be analyzed using EPA/821-R-02-12, Fifth Edition, or later amendment with Regional Board approval. Temperature and pH shall be recorded at the time of bioassay sample collection. Test species shall be salmonids, with no pH adjustment unless approved by the Executive Officer. Sample concurrent with ammonia sampling. Effluent shall be monitored in accordance with procedures described below.

⁶ Effluent shall be monitored in accordance with procedures described below.

⁷ Samples shall be analyzed for the toxic priority pollutants identified by the California Toxics Rule at 40 CFR 131.38. Effluent samples shall be collected simultaneously with receiving water samples to be analyzed for the CTR pollutants. Monitoring shall be conducted in accordance with procedures described below.

RECYCLED WATER MONITORING

Recycled water samples shall be collected where a representative sample can be obtained. Recycled water supply monitoring shall include at least the following:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Flow ¹	mgd	Meter	Continuous
Chlorine (Total) ¹	mg/L	Grab	Daily
Total Coliform ¹	MPN/100 mL	Grab	Weekly

¹ When recycled water is being supplied to the local ranch areas for irrigation.

SLUDGE MONITORING

A composite sample of sludge shall be collected annually, during any year that sludge is removed from the Rotating Biological Contactors or Ponds, in accordance with USEPA's *POTW Sludge Sampling and Analysis Guidance Document, August 1989*, and tested for the following metals:

Cadmium	Lead
Chromium	Nickel
Copper	Zinc

Sampling records shall be retained for a minimum of 5 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.

The Discharger shall submit annually by **30 January**:

1. Annual sludge production in dry tons and percent solids.
2. A schematic diagram showing sludge-handling facilities and a solids flow diagram.
3. Depth of application and drying time for sludge-drying beds.
4. A description of disposal methods, including the following information related to the disposal methods used at the facility. If more than one method is used, include the percentage of annual sludge production disposed by each method.
 - a. For **landfill disposal**, include: (1) the Board's waste discharge requirement numbers that regulate the landfill(s) used; (2) the present classifications of the landfill(s) used; and (3) the names and locations of the facilities receiving sludge.
 - b. For **land application**, include: (1) the location of the site(s); (2) the Board's waste discharge requirement numbers that regulate the site(s); (3) the application rate in lbs/acre/year (specify wet or dry); and (4) subsequent uses of the land.
 - c. For **other disposal methods**, include: (1) the location of the site(s); and (2) the Board's waste discharge requirement numbers that regulate the site(s).

RECEIVING WATER MONITORING

Receiving water monitoring shall be conducted when a discharge to Spanish Creek occurs All receiving water samples shall be grab samples. Receiving water samples shall be taken from the following:

<u>Station</u>	<u>Description</u>			
R-1	100' upstream of discharge			
R-2	100' downstream of discharge			
<u>Constituent</u>	<u>Unit</u>	<u>Station</u>	<u>Sampling Frequency</u>	
Dissolved Oxygen	mg/L	R-1, R-2	Weekly	
Total and Fecal Coliform	MPN/100 mL	R-1, R-2	Weekly	
pH	pH Units	R-1, R-2	Weekly	
Turbidity	NTU	R-1, R-2	Weekly	
Total Copper	ug/L	R-1, R-2	Monthly ¹	
Total Lead	ug/L	R-1, R-2	Monthly ¹	
Total Silver	ug/L	R-1, R-2	Monthly ¹	
Hardness	mg/L	R-1, R-2	Monthly ¹	

Temperature	°F	R-1, R-2	Monthly
<u>Electrical Conductivity</u>	µmho/cm	R-1, R-2	Monthly

¹Sampling for these constituents shall be obtained quarterly for the first year, even if no discharge to Spanish Creek is occurring, and monthly during times of discharge to Spanish Creek. After the first year, monitoring will be required monthly, and only when discharge to Spanish Creek occurs.

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions at the monitoring stations. Notes on receiving water conditions shall be summarized in the monitoring report. Receiving water shall be inspected for the presence or absence of:

- a. Floating or suspended matter
- b. Discoloration
- c. Bottom deposits
- d. Aquatic life

ACUTE TOXICITY MONITORING

Acute bioassay samples shall be collected on the first week of discharge and 90 days thereafter. 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. Except in instances of noncompliance, the Discharger shall not be required to monitor and record data more often than twice the frequencies listed in this schedule.

If any acute toxicity bioassay test result is less than 70 percent survival, or the results of the three previous samples indicate a median survival of less than 90 percent, the Discharger shall conduct three additional tests over a six-week period. The Discharger shall ensure that results of a failing acute toxicity test are received within 24 hours of the completion of the test, and the additional tests shall begin within 3 business days of the receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume regular testing. Of the three accelerated tests, if the results of any single test is less than 70 percent survival, or any two tests are less than 90 percent survival, then the Discharger shall conduct a Toxicity Reduction Evaluation in accordance with Provision H.3. of the Order.

CHRONIC TOXICITY MONITORING

Chronic toxicity monitoring shall be conducted to determine whether the effluent is contributing toxicity to the River. The testing shall be conducted as specified in USEPA 821-R-02-013 or its most recent edition. Chronic toxicity samples shall be collected at the discharge just prior to its entry into Spanish Creek. Samples shall be representative of the volume and quality of the discharge. Time of collection of samples shall be recorded. The effluent tests must be conducted with concurrent reference toxicant tests. Monthly laboratory reference toxicant tests may be substituted upon approval. Both the reference toxicant and effluent test must meet all test acceptability criteria as specified in the USEPA chronic manual. If the test acceptability criteria are not achieved, then the Discharger must resample and retest within 14 days. If undiluted effluent exhibits toxicity, the Discharger shall sample during the next available discharge event and conduct the test using a dilution series bracketing the concentration of effluent in the receiving water. Dilution water shall be receiving water from Spanish Creek taken

upstream from the discharge point. Laboratory water may be used for dilution water if upstream water exhibits toxicity. Chronic toxicity monitoring shall include the following:

Species: Pimephales promelas, Ceriodaphnia dubia, and Selenastrum capricornutum

Frequency: Once within 180 days of adoption of this permit and once 365 days prior to the permit expiration.

PRIORITY POLLUTANT MONITORING

The State Implementation Policy (SIP) requires periodic testing for the toxic priority pollutants established by the CTR in 40 CFR 131.48. The Discharger shall conduct two additional sampling events to provide additional information on effluent priority pollutants.

The Discharger shall conduct two sampling events and analyses for the CTR pollutants in receiving water and effluent. The first sampling event shall be conducted **within 180 days of the adoption of this Order**. The second sampling event shall be conducted no later than **365 days prior to permit expiration**. Receiving water samples shall be collected upstream at receiving water station R-1. Receiving water and effluent samples shall be collected simultaneously, and analyzed for the CTR pollutants (identified in Attachment G) plus pH and hardness. The Discharger is not required to perform dioxin and asbestos monitoring. All analyses shall be performed at a laboratory certified by the California Department of Health Services. The laboratory is required to submit the Minimum Level (ML) and the Method Detection Limit (MDL) with the reported results for each of the analytes. Laboratory methods and limits shall be as described in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (2000), unless a variance has been approved by the Executive Officer. If, after a review of the monitoring results, it is determined that the discharge causes, has the reasonable potential to cause, or contributes to in-stream excursions above water quality objectives, this Order will be reopened and limitations based on those objectives will be included. Additionally, if pollutants are detected, but insufficient information exists to establish an effluent limit or determine if an effluent limit is necessary, then additional monitoring will be required to provide sufficient information. Results shall be reported within **90 days of sample collection**.

All organic analyses shall be by Gas Chromatography/Mass Spectrometry (GCMS), Method 8260B for volatiles and Method 8270C for semi-volatiles. Pesticides shall be analyzed by Method 8081A. Dioxins shall be analyzed by Method 1613/8290. If organic analyses are run by Gas Chromatography (GC) methods, any detectables are to be confirmed by GCMS. Inorganics shall be analyzed by the following methods:

Metals shall be analyzed by the US EPA methods listed below. Alternative analytical procedures may be used with approval by the Regional Board if the alternative method has the same or better detection level than the method listed.

<u>Method Description</u>	EPA Method	Constituents
Inductively Coupled Plasma/Mass Spectrometry (ICP/MS)	1638	Antimony, Beryllium, Cadmium, Copper, Lead, Nickel, Selenium, Silver, Thallium, Total Chromium, Zinc
Cold Vapor Atomic Absorption (CVAA)	1631	Mercury
Gaseous Hydride Atomic Absorption (HYDRIDE)	206.3	Arsenic
Flame Atomic Absorption (FAA)	218.4	Chromium VI
Colorimetric	335./ 2 or 3	Cyanide

Analysis for the dioxin congeners shall be performed as described in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* using High Resolution Mass Spectrometry.

The laboratory is required to submit the Minimum Level (ML) and the Method Detection Limit (MDL) with the reported results for each constituent. The MDL should be as close as practicable to the U.S. EPA MDL determined by the procedure found in 40 CFR Part 136. The results of analytical determinations for the presence of chemical constituents in a sample shall use the following reporting protocols:

- a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory.
- b. Sample results less than the reported ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.
- c. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration." Numerical estimates of data quality may be by percent accuracy (+ or - a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
- d. Sample results that are less than the laboratory's MDL shall be reported as "Not Detected" or ND.

WATER SUPPLY MONITORING

The Discharger shall forward all testing (excluding bacteriological testing), performed on water supply wells that is required by the Department of Health Services.

COLLECTION SYSTEM OVERFLOW MONITORING

The Discharger shall report any collection system overflows in accordance with the Standard Provisions, and discuss the overflows in the monthly monitoring reports.

REPORTING

Monitoring results shall be submitted to the Regional Board by the **1st day of the second month** following sample collection (e.g., the January report is due by 1 March). Quarterly and annual monitoring results shall be submitted by the **1st day of the second month** following each calendar quarter and year, respectively

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 the compliance with waste discharge requirements.

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:

1. The names, certificate grades, and general responsibilities of all persons employed at the Plant (Standard Provision A.5).
2. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.
3. A statement certifying when flow meters and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration (Standard Provision C.6).
4. 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 Regional 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.

MONITORING AND REPORTING PROGRAM NO. R5-2004-0152
QUINCY COMMUNITY SERVICES DISTRICT
WASTEWATER TREATMENT PLANT AND COLLECTION SYSTEM
PLUMAS COUNTY

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

The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Board.

Ordered By:

THOMAS R. PINKOS
Executive Officer

15 October 2004
(Date)

RSD/sae

FACT SHEET

ORDER NO. R5-2004-0152
NPDES NO. CA0078981
QUINCY COMMUNITY SERVICES DISTRICT
WASTEWATER TREATMENT PLANT AND COLLECTION SYSTEM
PLUMAS COUNTY

GENERAL INFORMATION

The towns of East Quincy and Quincy are located in Plumas County, on Highway 70, approximately 70 miles northwest of Reno, Nevada, and 50 miles northeast of Oroville. Quincy and East Quincy are at the southern boundary of the Cascade Mountains, in American Valley, at an approximate elevation of 3,500 feet. Average annual precipitation in the area is 40 inches, a portion of which falls as snow.

Spanish Creek is the predominant surface water feature in the area, and flows in an easterly and northeasterly direction on the western boundary of Quincy and American Valley. The population of Quincy is approximately 1,879 and East Quincy population is approximately 2,572 (2000 census).

Both Quincy and East Quincy have separate community services districts for collection of wastewater, the Quincy Community Services District (QCSD), and the East Quincy Community Services District (EQCSD), respectively. The treatment plant is operated under a joint powers agreement between the two districts by the American Valley Services Authority.

The QCSD owns and operates the wastewater treatment plant. The Plant and discharge are within Section 11, 12, and 14, T24N, R9E, MDB&M. Due to the primarily residential and light commercial uses in both towns, the wastewater discharged to the treatment plant is predominately domestic. The biochemical oxygen demand, total suspended solids, and settleable solids are therefore relatively predictable. Additionally, no significant concentrations of priority pollutants or other organic compounds are expected in the Plant influent or effluent.

The wastewater treatment plant consists of:

- A headworks (a comminutor and a manually cleaned bar screen, and a Parshall Flume with a sonic level sensor, and an aerated grit chamber);
- A septage receiving facility;
- Two parallel rotating biological contactor trains, each with three 12 foot diameter units in series;
- Four one quarter acre settling/polishing ponds;
- A serpentine chlorine contact chamber;
- Dechlorination by addition of sodium bisulfite;

- A 6 acre (approximate size) irrigation storage pond (15.6 acre-feet).
- A 35 acre (approximate size) emergency storage pond (110 acre-feet)

The headworks is operated to routinely deliver wastewater to a grinder, which is designed to prevent large solids, such as rags, from passing intact into the main treatment processes. The grinder is valved to allow diversion of the wastewater to a manually cleaned bar screen.

The Plant receives septage from septic tanks in Plumas County. The Discharger's records indicate that during 2002 and 2003, approximately one million gallons of septage were delivered to the plant each year. The BOD of septage generally ranges from 2,000 to 30,000 mg/L, and the septage may upset the wastewater treatment process if not metered to the headworks of the Plant at an appropriate flow rate. The QCSD implements a load checking program to help assure that no illegal wastes are delivered to the Plant. When a load of septage arrives at the treatment plant, the hauler must have a key card to enter the septage dumping location. Insertion of the key card causes the hauler's account to be debited for the routine charge for the disposal of one tank of septage. The hauler must enter into a contract with the QCSD before they are issued a card for dumping. Gates to the Plant and therefore to the septage dumping station are closed and locked after hours and on weekends.

The rotating biological contactors are fixed film treatment units with a series of thin circular plastic disks attached axially to each other. The assembly of disks rotates around a common shaft, with approximately half of the disk area submerged in the wastewater at any time. The biological film that builds on the disk assembly is responsible for the treatment of the wastewater. The alternating submergence and exposure of the disks to the atmosphere provides the mechanism for aeration and maintenance of aerobic conditions of the wastewater.

Subsequent to treatment in the biological contactors, wastewater flows by gravity to a complex of four stabilization/polishing ponds. The ponds are generally operated in two parallel trains, each train consisting of two ponds in series, each series with approximately one half acre of area and a contact time of approximately one day at Plant design flow. Each pond can be fed independently of the others. Each pond has a 10 hp aerator that is run continuously when the pond is in use.

Each of the four stabilization/polishing ponds was constructed with an underlying six-inch bentonite layer to reduce groundwater infiltration into the ponds during the winter. There is no information available on the permeability of the bentonite layers.

Wastewater is disinfected by injection of a 12.5 percent sodium hypochlorite solution. Chlorine dose is determined by calculating the volume of hypochlorite needed to maintain target residual chlorine concentrations at the entrance and exit of the chamber. Chlorine concentrations are measured at these locations to assure that the chlorine dose is adequate. There are two identical contact chambers, each capable of providing 30 minutes of contact time at maximum hourly flow (3.26 mgd). During discharge to Spanish Creek or its tributaries, effluent is dechlorinated with a 25 per cent sodium bisulfite solution.

Discharge of wastewater to Spanish Creek or its tributaries is permitted from 1 November to 15 May. Currently, during those times wastewater is first discharged to Clear Stream. Clear Stream ceases to have natural flow sometime in mid-summer, and does not begin to flow again until the rainy season begins, sometime from September to October. From Clear Stream, the effluent, whether or not co-mingled with water present in the stream, is discharged to Spanish Creek. The stream distance from the discharge at Clear Stream to Spanish Creek is approximately 4,000 feet. Currently, there is no diffuser at the discharge, and mixing of Clear Stream discharge with Spanish Creek is poor.

Under the Clean Water Act, Clear Stream is defined as a water of the United States. Therefore, during those times effluent is discharging to Clear Stream, and the effluent is the sole flow in Clear Stream, the Discharger's effluent would be required to meet receiving water quality objectives. Therefore, the QCSD is investigating the cessation of discharge to Clear Stream, and discharging instead directly to Spanish Creek, when the Order allows such a discharge. In addition, the QCSD is studying whether the direct discharge will require a diffuser to obtain dilution credits that would be necessary to attain water quality objectives outside of the effluent mixing zone. The Order requires a dilution study be submitted within 180 days of Order adoption. The Order also requires that if an effluent diffuser is needed, that it be installed within 2 years of study completion.

Currently, when discharge to Spanish Creek is prohibited, chlorination is bypassed, and wastewater is delivered to the irrigation pond. Simultaneously, Clear Stream channel is dammed downstream of the irrigation pond (there is generally little or no flow in Clear Stream during the irrigation season). Wastewater can then be discharged to Clear Stream, where it flows to the Leonhardt Ranch irrigation pumps. Order No. 96-180 regulates the Leonhardt Ranch reclamation practices.

This tentative Order calls for continuous chlorination of effluent, including those times effluent is used to irrigate the Leonhardt Ranch, and requires that effluent median concentrations of coliform be less than 23 MPN/100 mL during discharge to Spanish Creek or its tributaries and to the Leonhardt Ranch. The continuous disinfection is necessary to protect groundwater in the area of irrigation as well as to protect Clear Stream and Spanish Creek or its tributaries from storm water runoff from Leonhardt Ranch potentially contaminated with pathogenic bacteria or virus.

During the rainy season when infiltration and inflow (I/I) is highest, and the Plant cannot process all incoming wastewater and meet effluent limitations, or when effluent flow limitations may be exceeded, influent flow is partially diverted to the emergency storage pond. The flow is later returned to the headworks of the Plant when high flows have abated. This pond has a volume of 110 acre-feet, which is approximately 25 days storage volume at the Plant design effluent flow. The emergency pond is generally used every year. According to the QCSD manager, and the pond plans, it does not appear that the emergency storage pond is lined.

The volume of each chlorine contact chamber is approximately 69,000 gallons. Contact time at maximum wastewater flow through the chamber is approximately 30 minutes. The length to width ratio of the contact chamber is well in excess of the 20:1 value considered to be a minimum for adequate disinfection. Effluent de-chlorination is accomplished by the injection of a 25 per cent sodium bisulfite (bisulfite) solution prior to discharge of wastewater to Clear Stream. Bisulfite dosage is set at a constant

rate based upon the chlorine dosage. Both the chlorine and bisulfite dosage points are equipped with stirring devices to promote good mixing. Formerly, during times of discharge to Clear Stream, effluent chlorine was measured only once per day with a colorimetric analyzer. The Discharger recently installed a continuous effluent chlorine analyzer.

Discharge from the wastewater treatment plant is presently regulated by Waste Discharge Requirements Order No. 99-020 (NPDES No. CA CA0078981), adopted by the Board on 30 April 1999.

Inspections performed by Regional Board staff and USEPA's contractor (TetraTech) during the term of the previous Order have revealed the following conditions at the Plant:

30 March 2000: Samples of effluent obtained, no violations noted.

16 February 2001: No sampling, no violations noted

23 April 2003: Inspection by TetraTech. This inspection noted several unsatisfactory conditions, including lack of an industrial storm water pollution permit and Storm Water Pollution Prevention Plan, and lack of an appropriate sludge management program. This Order requires the Discharger to apply for coverage in the industrial storm water permit program, and to develop and submit a sludge management plan.

Collection system inspections and improvements to alleviate chronic infiltration/inflow (I/I) problems and collection system overflows have been part of an on-going effort by both the QCSD and the EQCSD. This Order requires the QCSD's program be formalized with a written plan and program time schedule. The EQCSD collection system will be regulated under separate waste discharge requirements.

EXISTING PERMIT

The existing waste discharge requirements require maximum 30-day average concentration effluent limitations for BOD and TSS of 30 mg/L, and effluent pH between 6.5 and 8.5, effluent total coliform no greater than a monthly median of 23 MPN/100 mL, and a maximum effluent chlorine limitation of 0.1 mg/L. Acute and chronic toxicity testing must demonstrate the absence of any toxicity.

SUMMARY OF DRAFT PERMIT

Based on the new Report of Waste Discharge, permitted discharge flow remains the same as in the previous Order. This Order requires the Discharger to develop and submit: 1) a plan and semi-annual progress reports regarding modifications to the effluent discharge point and a proposed wetland treatment area if the Discharger decides to move the discharge point to Spanish Creek; 2) a Sanitary Sewer System Operation, Maintenance, and Overflow Prevention and Response Plan; 3) an annual sludge disposal plan; 4) a report estimating the 1Q10 and 7Q10 flows in Spanish Creek if the Discharger decides to move the discharge point to Spanish Creek; 5) a report analyzing the wastewater dilution available in Spanish Creek if the Discharger decides to move the discharge point to Spanish Creek; 6) a report on the ambient concentrations of copper, lead, and silver in Spanish Creek; 7) a Title 22

Engineering Report regarding the recycled water irrigation of the Leonhardt Ranch; and 8) a compliance schedule justification for the interim copper, lead, and silver interim effluent limitations. If the Discharger decides not to move the effluent discharge point to Spanish Creek, a compliance plan for meeting final effluent limits without dilution credits must be submitted. This Order also requires the Discharger to: 1) Apply for coverage under the Storm Water General Industrial Permit; 2) and to provide information on whether certain pollutants in the discharge (ammonia and TDS) have a reasonable potential to cause or contribute to an in-stream excursion above a water quality objective. The Order may be reopened to establish revised water quality based effluent limitations if supplemental data indicates any pollutants have a reasonable potential to cause an exceedance of a water quality objective, or if dilution studies and additional effluent and receiving water monitoring indicate less stringent final effluent limits are appropriate.

The QCSD has had occasional exceedances of their acute toxicity limitation. Monitoring and Reporting Program No. _____ requires that an additional acute toxicity test be initiated immediate in case of any test indicating mortality in excess of 70 percent, or at any time the median survival of the previous three tests is less than 90 percent.

RECEIVING WATER BENEFICAL USES

The Board adopted a Water Quality Control Plan; Fourth Edition, for the Sacramento River and San Joaquin River Basins (Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the Basin. The requirements in this Order implement the Basin Plan.

The Basin Plan on page II-2.00 states: “Existing and potential beneficial uses which currently apply to surface waters of the basins are presented in Figure II-1 and Table II-1. The beneficial uses of any specifically identified water body generally apply to its tributary streams.”

The Basin Plan does not specifically identify any beneficial uses for Spanish Creek and its tributaries. However, the Basin Plan does identify present and potential beneficial uses for the North Fork of the Feather River , to which Spanish Creek is tributary.

The Basin Plan identifies the following beneficial uses for the North Fork of the Feather River: municipal and domestic supply (MUN); power generation (POW), water contact recreation and canoeing and rafting (REC-1); non-contact recreation (REC-2); cold freshwater habitat (COLD); cold water spawning, reproduction, and/or early development (SPWN); and wildlife habitat (WILD).

The Basin Plan, with respect to disposal of wastewaters, states that “...disposal of wastewaters is [not] a prohibited use of waters of the State; it is merely a use which cannot be satisfied to the detriment of beneficial uses.” Upon review of the flow conditions, habitat values, and beneficial uses of Spanish Creek and its tributaries, the Regional Board finds that the beneficial uses identified in the Basin Plan for the North Fork of the Feather River are applicable to Spanish Creek and its tributaries. Refer to the Findings for a description of the rationale for the Board’s decision on this applicability.

The beneficial uses of groundwater are municipal and domestic water supply, agricultural supply, industrial service supply, and industrial process supply.

WATER QUALITY OBJECTIVES, REASONABLE POTENTIAL ANALYSIS, AND BASIS FOR PERMIT EFFLUENT LIMITATIONS (NON-PRIORITY POLLUTANTS)

The Porter Cologne Water Quality Control Act defines water quality objectives as "...the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area." Water quality objectives designed to protect beneficial uses and prevent nuisances are found in the Basin Plan, and may be stated in either numerical or narrative form.

Federal Regulations require that, in setting effluent limitations, the Regional Board assure that the Discharger meets the more stringent of the: 1) technology based effluent limitations found in 40 CFR Part 133; or 2) limitations developed to assure that water quality objectives are not exceeded when it is shown that there is a reasonable potential for the pollutant to cause such an exceedance. The latter requirement applies to both numeric and narrative water quality objectives.

Determining reasonable potential for pollutants other than those contained in the CTR is accomplished by analyzing Plant operations, past effluent monitoring results, and other pertinent factors. In addition, the USEPA has provided guidance for the analysis of reasonable potential in their *Technical Support Document for Water Quality Based Toxics Control* (EPA/505/2-90-101) or TSD, which has been considered in this permit for developing effluent limitations for pollutants other than those in the CTR and NTR. The TSD allows the use of a mixing zone (an area in the receiving water where the concentration of pollutants may exceed the water quality objective) in the determination of reasonable potential. Outside the mixing zone, the concentration of the pollutant must be less than the water quality objective. If a mixing zone is allowed, and it is determined that the concentration of the pollutant will not exceed the water quality objective outside the mixing zone, an effluent limitation is not required. The determination whether to allow a mixing zone and the determination of an effluent limitation are pollutant specific decisions.

The following sections discuss pollutants for which there are water quality objectives to protect a specified beneficial use (excepting priority pollutants, which, in accordance with the SIP, must be addressed differently), as well as pollutants that could cause exceedance of the Basin Plan's narrative toxicity objectives. If a technology based effluent limitation is required for the pollutant, this requirement is noted. The basis for the decision whether or not to set an effluent limitation is given, as well as the rationale for the numerical value of the effluent limitation, if one is established.

a. Coliform (Total and Fecal):

Technology based effluent limitation: None

Receiving water objective: The Basin Plan states "The fecal coliform concentration [in surface waters] based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200 MPN/100 mL nor shall more than ten percent of

the total number of samples taken during any 30-day period exceed 400 MPN/100 mL.” In a letter to the Regional Board dated 8 April 1999, the California Department of Health Services indicated that DHS would consider wastewater discharged to water bodies with identified beneficial uses of irrigation, contact recreation, or a drinking water source to be adequately disinfected if: 1) the wastewater receives dilution of more than 20:1; 2) the effluent coli form concentration does not exceed 23 MPN/100 m/ as a 7-day median and: 3) the effluent coliform concentration does not exceed 240 MPN/100 mL more than once in any 30 day period.

Order effluent limitation: The current effluent limit for total coliform is 23 MPN/100mL. This effluent limit is being retained in this Order. However, during the fall season, a 20:1 dilution of effluent in Spanish Creek may not be achievable, which would potentially necessitate more stringent disinfection requirements. Upon completion of the Spanish Creek flow analysis and dilution study required by this Order, this permit may be reopened and a revised effluent limitation for coliform may be adopted. As the fecal coliform concentration of any sample is less than or equal to the total coliform concentration in accordance with the bacteriological definition of coliform and analytical detection procedures for these bacteria, this effluent limitation will implement the Basin Plan water quality objective for fecal coliform.

b. Biostimulatory Substances:

Technology based effluent limitation: None

Receiving water objective: The Basin Plan states, “Water shall not contain biostimulatory substances which promote aquatic growth or in concentrations that cause nuisance or adversely affect beneficial uses.” The primary constituents of concern for this objective are nitrogen and phosphorus.

Order effluent limitation: Although nutrients and other biostimulatory substances may be present in the discharge, no nuisance conditions such as excess algae growth are anticipated. In addition, this discharge has been occurring for many years, and there is no record in the case files of any complaints or problems with excessive aquatic growth. Neither have inspections by Regional Board staff revealed problems with algae or other aquatic growth. Therefore no effluent limitation for biostimulatory substances is established in this permit. However, receiving water quality limitations prohibit the discharge from causing fungi, slimes, or other objectionable growths. After completion of studies on the flow and wastewater dilution available in Spanish Creek, the Order may be reopened and effluent limits established for nutrients if necessary.

c. Chemical Constituents:

Technology based effluent limitation: None

Receiving water objective: At a minimum, water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into

this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, and Tables 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limitations) and 64449-B (Secondary Maximum Contaminant Levels-Ranges) of Section 64449. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. At a minimum, water designated for use as domestic or municipal supply (MUN) shall not contain lead in excess of 0.015 mg/L. The Regional Water Board acknowledges that specific treatment requirements are imposed by state and federal drinking water regulations on the consumption of surface waters under specific circumstances. To protect all beneficial uses the Regional Board may apply limitations more stringent than MCLs.

Order effluent limitation: Examination of the results of priority pollutant testing required by the CTR, as well as general information on water quality, illustrates that there should be no exceedance of primary or secondary MCLs in Spanish Creek or its tributaries (if effluent limitations in the Order are complied with). Therefore there are no effluent limitations for any of these chemical constituents, with the exception of lead. The established effluent for lead, however, is necessitated by a reasonable potential exceedance of the water quality objective for aquatic life, rather than the objective for drinking water.

d. Color:

Technology based effluent limitation: None

Receiving water objective: The Basin Plan states that “Water shall be free of discoloration that causes nuisance or adversely affects beneficial uses.”

Order effluent limitation: There is no significant coloration to the discharge; therefore no effluent limitations for color have been included in the Order.

e. Dissolved Oxygen (DO):

Technology based effluent limitation: None

Receiving water objective: The Basin Plan states; “For surface water bodies outside the legal boundaries of the Delta, the monthly median of the mean daily dissolved oxygen (DO) concentration shall not fall below 85 percent of saturation in the main water mass, and the 95th percentile concentration shall not fall below 75 percent of saturation. The DO concentration shall not be reduced below the following minimum levels at any time:

Waters designated WARM 5.0 mg/L

Waters designated COLD 7.0 mg/L

Waters designated SPWN 7.0 mg/L”

The Order prohibits discharge to the Creek from 16 May to 1 November unless there is an unforeseen Plant emergency. During discharge periods the flow in Spanish Creek consists of storm water run off and flow gained from groundwater recharge, which generally are

high in dissolved oxygen. The effluent discharge, therefore, should not contribute to a decrease in DO in the Creek.

Order Effluent Limitation: No effluent limitation has been included in this Order due to the lack of reasonable potential for failure to achieve water quality objectives and the lack of a technology based effluent limitation.

f. Biochemical Oxygen Demand (BOD):

Technology based effluent limitation: Federal Regulations, 40 CFR, Part 133, provide technology based effluent limitations for BOD. Pursuant to the regulations at 40 CFR Parts 133.105(a), (b), and 133.103, the BOD 30-day average discharge limitation for a secondary treatment system 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.

Receiving water objective: There is no Basin Plan water quality objective for BOD. However, the level of BOD in the discharge could affect dissolved oxygen concentrations in the receiving water, and in fact is the main constituent that could reduce oxygen to unacceptably low levels. But as indicated in Item e. above, the discharge will not cause a significant decrease in the dissolved oxygen in the receiving water.

Order effluent limitation: The technology based effluent is the relevant criterion to consider for setting an effluent limitation, which has been used.

g. Floating Material:

Technology based effluent limitation: None

Receiving water objective: The Basin Plan states, "Water shall not contain floating material in amounts that cause nuisance or adversely affect beneficial uses." The Receiving Water Limitations in this permit prohibit floating material in amounts that exceed this Basin Plan water quality objective.

This discharge has been occurring for many years, and there is no record in the case files of any complaints or problems with excessive floating material. Neither have Regional Board staff inspections revealed problems with floating material.

Order effluent limitation: No effluent limit for floating material is established in this permit. However, receiving water quality limitations prohibit the Discharger from causing a nuisance or adversely affecting beneficial uses due to floating material.

h. Oil and Grease:

Technology based effluent limitation: None

Receiving water objective: The Basin Plan states "Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses."

The current wastewater treatment activity is not anticipated to generate any oils, greases, waxes, or other materials that can cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.

Order effluent limitation: No effluent limitation has been included in this Order due to the lack of reasonable potential for failure to achieve water quality objectives, and the lack of a technology based effluent limitation.

i. pH:

Technology based effluent limitation: From 6.0 to 9.0

Receiving water objective: The Basin Plan provides that the pH (of surface waters) shall not be depressed below 6.5 nor raised above 8.5 pH Units. The Basin Plan further provides that changes in normal ambient pH levels shall not exceed 0.5 pH Units in fresh waters with designated COLD or WARM beneficial uses.

The wastewater analysis submitted by the QCSD indicates the lowest and highest pH values of 6.3 and 7.6 in the effluent, respectively. These readings indicate that the current wastewater treatment activity has a reasonable potential to generate effluent with pH values that could adversely affect beneficial uses.

Order effluent limitation: An effluent limitation for this criterion is set at 6.0 (daily minimum) and 9.0 (daily maximum), which is protective of receiving waters due to available dilution in the Creek, and complies with the technology based effluent limitation.

j. Pesticides:

Technology based effluent limitation: None

Receiving water objective: The Basin Plan States; “1) No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses; 2) Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses; 3) Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the USEPA or the Executive Officer; 4) Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies (see SWRCB Resolution 68-16 and 40 CFR Section 131.12.); 5) Pesticide concentrations shall not exceed the lowest levels technically and economically achievable; 5) Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15; and 6) Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of thiobencarb in excess of 1.0 µg/L.”

Order effluent limitation: In accordance with the California Toxics Rule, the QCSD has tested for a total of 18 different pesticides and herbicides, and none have been found to be present. Therefore there are no effluent limitations for pesticides in this Order.

k. Radioactivity:

Technology based effluent limitation: None

Receiving water objective: The Basin Plan States; “Radionuclides shall not be present in concentrations that are harmful to human, plant, animal or aquatic life nor 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. At a minimum, waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of radionuclides in excess of the maximum contaminant levels (MCLs) specified in Table 4 (MCL Radioactivity) of Section 64443 of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect.”

Order effluent limitation: No unacceptable levels of radionuclides are expected the Feather River or in the QCSD’s effluent. Therefore, no effluent limitations for radionuclides are contained in this Order.

l. Salinity:

Technology based effluent limitation: None

Receiving water objective: The Basin Plan objective for electrical conductivity in the Feather River, after complete mixing, is 150 umhos/cm (as a 90th percentile).

Order effluent limitation: No data has been obtained in previous permits regarding electrical conductivity of effluent or receiving water. Prior to drafting this Order, electrical conductivity was measured twice in Spanish Creek by QCSD staff at the request of Regional Board staff, and the average of the two samples was 135 umho/cm. QCSD staff also obtained samples of effluent for analysis of conductivity, and obtained readings in excess of 600 umho/cm. The Discharger is required to obtain data on effluent and receiving water electrical conductivity to confirm that the water quality objective will not be exceeded in the North Fork of the Feather River. After completion of studies on the flow and wastewater dilution available in Spanish Creek, the Order may be reopened and effluent limits established for nutrients if necessary.

m. Total Suspended Matter:

Technology based effluent limitation: Federal regulations, 40 CFR, Part 133, provides technology based effluent limitations for total suspended solids (TSS). Pursuant to the regulations at 40 CFR Parts 133.105(a), (b), and 133.103, the TSS 30-day average discharge limitation for secondary systems shall not exceed 30 mg/L, the 7-day average shall not exceed 45 mg/L, and the 30-day TSS percent removal shall not be less than 45 percent.

Receiving water objective: Regarding suspended material, the Basin Plan states: “Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.”

The current wastewater treatment process has a reasonable potential to generate suspended matter in quantities that would cause exceedance of the above narrative standard. Municipal wastewater contains suspended matter, some of which will escape the treatment and/or removal process. At times any of the ponds could discharge excessive solids due to process problems or re-suspension of sludge due to waves formed from wind action. Ponds also produce significant algae that are difficult to remove prior to discharge.

Order effluent limitation: The QCSD has shown that the wastewater treatment plant is capable of meeting a TSS effluent limitation of 30 mg/L and an 85 percent removal, and this effluent limitation will implement the Basin Plan water quality objective. Therefore, the technology-based effluent is the relevant criterion to consider for setting an effluent limitation, which has been used.

n. Temperature:

Technology based effluent limitation: None

Receiving water objective: The Basin Plan states: “The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of COLD or WARM intrastate waters be increased more than 5°F above natural receiving water temperature. In determining compliance with the water quality objectives for temperature, appropriate averaging periods may be applied provided that beneficial uses will be fully protected.”

Order Effluent Limitation: The current practice of effluent discharge is not expected to cause variation in receiving water temperature by more than 1°F because the ponds have a substantial residence time, causing the water to equilibrate with the ambient temperature. Most of the year, especially at times of discharge, this will result in an effluent temperature that is close to the temperature of the receiving water. **Dilution of the wastewater will also significantly reduce any temperature increases.** Consequently, no effluent limitation has been included in this Order.

o. Toxicity:

Technology based effluent limitation: None

Receiving water objective: The Basin Plan provides that relative to toxicity: “All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances.” The potential for human toxicity from individual pollutants is addressed in each of the individual pollutant sections in this Order. The potential for toxicity to plant and aquatic life is addressed by provisions that require characterization of

the discharge for chronic and acute toxicity. Effluent must result in survival of test fishes in 96-hour bioassays of undiluted effluent be no less than:

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

The QCSD may use the results of dilution, Creek flow, and mixing studies to propose the adoption of an acute toxicity mixing zone

Order Effluent Limitation: The Discharger is required to conduct the chronic toxicity testing as 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, this Order requires the Discharger to initiate a Toxicity Identification Evaluation (TIE) to identify the causes of toxicity. Upon completion of the TIE, the Discharger will submit a work plan 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.

In addition, some metals have been found to have a reasonable potential to exceed the water quality objectives in the CTR in accordance with the SIP. The deleterious effects of these pollutants on Spanish Creek or its tributaries would primarily be due to toxicity to fish and other aquatic species. Effluent monitoring for these compounds is included in this permit as described below under “**REASONABLE POTENTIAL ANALYSIS FOR CTR AND NTR CONSTITUENTS.**” Chlorine and ammonia are also compounds that may cause toxicity in Spanish Creek or its tributaries. Methods of addressing potential chlorine and ammonia toxicity are described in items q. and r.

p. Turbidity:

Technology based effluent limitation: None

Receiving water objective: The Basin Plan states: “Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in turbidity attributable to controllable water quality factors shall not exceed the following limitations:

- Where natural turbidity is between 0 and 5 nusselt turbidity units (NTUs), increases shall not exceed 1 NTU.
- Where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent.
- Where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTU’s.

- Where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.”

Order Effluent Limitation: There may be a reasonable potential to exceed the receiving water turbidity criteria due to discharges from the ponds. Although discharges occur during the period when a significant dilution in the Creek is available, small amounts of turbidity laden water can cause significant turbidity increases, even with large dilutions. Therefore, receiving water limitations have been incorporated into this Order in conformance with Basin Plan objectives. Averaging periods for compliance calculations are allowed if approved by the Executive Officer.

q. Chlorine:

Technology based effluent limitation: None

Receiving water objective: See the Basin Plan objective above under Toxicity.

Chlorine can be toxic to aquatic life and has reasonable potential to be discharged at significant concentrations. The current effluent limitation for total chlorine residual is 0.1 mg/L as a daily maximum. The USEPA has developed ambient water quality criteria for chlorine to protect freshwater aquatic organisms. The USEPA’s ambient water quality criteria for protection of aquatic life are 11 µg/L as a 4-day average (chronic) concentration, and 19 µg/L as a 1-hour average (acute) concentration for total chlorine residual.

Order effluent limitation: This permit contains effluent discharge limitations for total chlorine residual of 0.01 mg/L as a 4-day average, and 0.02 mg/L as an hourly average based on the USEPA ambient criteria to protect aquatic life. Monitoring for this constituent is on a continuous basis.

r. Ammonia:

Technology based effluent limitation: None

Receiving water objective: See the Basin *Plan* objective above under Toxicity.

Ammonia concentrations in the effluent from domestic wastewater treatment plants without nitrification capabilities (conversion of ammonia to nitrate), in general, are higher than USEPA recommended freshwater criteria. Although the wastewater treatment plant is capable of nitrification, nitrification may not occur year-round due to the cold climate, and therefore there is insufficient data to determine a reasonable potential for effluent ammonia to cause or contribute to an in-stream excursion above the Basin Plan narrative toxicity objective. The USEPA has published revised ambient water quality criteria for ammonia (1999 Ammonia Update), superseding all previous USEPA recommended freshwater criteria for ammonia.

Order Effluent Limitation: This Order contains requirements for monitoring effluent ammonia, and a re-opener to set ammonia effluent limitations if it is determined that

ammonia in the effluent presents a reasonable potential for exceedance for a water quality objective.

REASONABLE POTENTIAL ANALYSIS FOR CTR AND NTR POLLUTANTS

Final Effluent Limitations

The 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 (SWRCB) 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 SIP provides the method for determining reasonable potential for priority pollutants defined in the NTR and CTR. The SIP does not allow a mixing zone for determination of reasonable potential, but does allow a mixing zone for determination of the appropriate effluent limitation.

On 5 January 2001, the QCSD was issued a letter under the authority of California Water Code Section 13267 requesting effluent and receiving water monitoring to meet the requirements of the SIP. The QCSD has sampled wastewater treatment plant effluent and receiving water on four occasions to determine if the priority pollutants established in the CTR and NTR are present.

The beneficial uses pertinent to Spanish Creek and its tributaries in terms of a reasonable potential analysis for the NTR and CTR priority pollutants include freshwater aquatic habitat, municipal water supply, and municipal water supply coupled with human consumption of fish and other food from Spanish Creek or its tributaries. In addition to the water quality standards given in the NTR and CTR, the Basin Plan objectives were also considered. The most stringent of those applicable water quality objectives or standards is given in the table below. Water quality objectives for metals based upon the NTR and CTR have been adjusted for water hardness and metals translators as described in the SIP and Basin Plan. The hardness used for these adjustments was the lowest hardness detected in Spanish Creek (24 ppm). For constituents that are hardness dependent, use of the lowest hardness in Spanish Creek provides the most conservative estimate of the potential for exceedance of a water quality objective.

In February 2001, December 2001, December 2001, April 2002, and January 2003, the Discharger collected and analyzed effluent and receiving water samples for priority pollutants in accordance with the CTR and the SIP. Minimum levels and method detection limits were found to be acceptable. A discussion of the CTR and NTR standards is given in the Order Findings.

The first two tables below summarize CTR sampling results (only those constituents detected in the monitoring program are presented) and applicable water quality criteria/objectives, respectively. The third and final table compares each maximum effluent concentration with the lowest corresponding water quality criterion to establish whether an effluent limitation is required per Section 1.3 of the SIP.

Summary of Positive CTR Sample Results¹

Constituent	Receiving Water				Effluent			
	02/07/01	12/11/01	04/15/02	01/28/03	02/07/01	12/11/01	04/15/02	01/28/03
pH	7.3	6.9	6.9	7.6	7.0	7.0	6.9	7.3
Hardness	55	57	24	45	59	61	43	61
Arsenic	nd	0.2	0.3	nd	nd	0.5	0.6	0.6
Chromium (total)	nd	0.3	0.5	0.9	nd	0.4	0.8	0.5
Chromium (VI)	nd	nd	nd	nd	nd	nd	nd	2
Copper	nd	0.9	nd	6	8	14.7	16.8	18.0
Lead	nd	0.26	0.01	0.26	nd	0.7	0.7	0.47
Mercury	0.001	0.0022	0.0051	0.0026	0.015	0.0094	0.012	0.025
Nickel	nd	5	6	9	nd	2	3	3
Selenium	0.8	nd	0.2	nd	1.4	0.3	0.5	0.5
Silver	nd	nd	nd	nd	nd	0.75	nd	nd
Thallium	nd	nd	nd	nd	nd	0.02	nd	nd
Zinc	nd	7	8	7	18	26	32	31
Chloroform	nd	nd	nd	nd	1.2	0.9	1.4	nd
Bis(2-Ethylhexyl) phthalate	nd	nd	nd	nd	nd	nd	3	3
Di-n-Butyl Pthalate	nd	nd	nd	nd	nd	nd	6	nd

¹ Metals results expressed as total concentrations.

Units are mg/L for hardness and µg/L for all other parameters except pH.

nd = not detected

Constituent	California Toxics Rule Criteria ¹ (ug/L)				Basin Plan ⁴
	Freshwater		Human Health		
	CMC ²	CCC ³	Consumption of water & aquatic life	Consumption of aquatic life only	
Arsenic	340	150	none	none	10 & 50
Chromium (total) ^{5,6}	171	55	none	none	none
Chromium (VI)	15.7	10.6	none	none	none
Copper ⁵	3.5	2.7	1,300	none	15
Lead ⁵	13.3	0.52	none	none	15
Mercury	none	none	0.050	0.051	2
Nickel ⁵	140	15.6	610	4600	100
Selenium ⁵	none	5.0	none	none	50
Silver ⁵	0.30	none	none	none	100
Thallium ⁵	none	none	1.7	6.3	2
Zinc ⁵	35	35	none	none	5000
Chloroform	none	none	none	none	1,240 ⁶
Bis(2-Ethylhexyl) phthalate	none	none	1.8	5.9	4
Di-n-Butyl Pthalate	none	none	2,700	12,000	none

¹ Expressed as dissolved concentrations.

² Criterion Maximum Concentration (acute toxicity)

³ Criterion Continuous Concentration (chronic toxicity)

⁴ Basin Plan MUN.

⁵ Freshwater criteria based on dissolved concentration at hardness of 24 mg/L.

⁶ Based on CTR criteria for chromium (III).

⁷ Lowest Observed Effects Level (Chronic), National Ambient Water Quality Criteria, Freshwater Aquatic Life Protection.

**Comparison of Maximum Effluent and Receiving Water Concentrations with
 Lowest Water Quality Criteria (µg/L)¹**

Constituent	Maximum Concentration	Lowest Applicable Water Quality Criterion^{2,3}	Effluent Limitation Required? (Y/N)
Arsenic	0.6	10	N
Chromium (total)	0.9	64	N
Chromium (VI)	2	11	N
Copper	18.0	2.8	Y
Lead	0.75	0.52	Y
Mercury	0.025	0.050	N
Nickel	9	16	N
Selenium	1.4	5	N
Silver	0.75	0.35	Y
Thallium	0.02	1.7	N
Zinc	32	35	N
Chloroform	1.4	1,240	N
Bis(2-Ethylhexyl) phthalate	3	1.8	Y
Di-n-Butyl Pthalate	6	2700	N

¹ Constituents not detected in effluent have been omitted.

² Criteria for inorganic constituents have been adjusted from dissolved to total concentrations using SIP Appendix 3 for comparison to measured effluent concentrations.

³ Based on previous table and Beneficial Uses for the North Fork of the Feather River.

Based on the above analysis, the Regional Board has concluded that reasonable potential exists for copper, lead, and silver to cause or contribute to an excursion above numeric water quality objectives. As a result, effluent limitations for these pollutants are proposed in the Order. Refer to attachments C, D, E, and F for calculations of the appropriate effluent limitations for these pollutants. Interim effluent limitations based upon historical plant performance are also included in the Order. Refer to **Interim Effluent Limitations** below.

Bis(2-Ethylhexyl) phthalate is a common contaminant of sample containers, sampling apparatus, and analytical equipment, and it is therefore possible that it is not truly present in the receiving water or effluent discharge. The Order requires the Discharger to take steps to assure that sampling containers and apparatus are not the source of this contaminant. If changes in sampling and/or analytical procedures and equipment indicate that bis(2-Ethylhexyl) phthalate is not actually present in the effluent or receiving water samples at concentrations that trigger reasonable potential according to the SIP, then effluent limitations are not necessary. If bis(2-Ethylhexyl) phthalate continues to be detected in the effluent and/or receiving water, the Order may be reopened and modified to include an appropriate effluent limitation for bis(2-Ethylhexyl) phthalate.

Asbestos, dioxin (2,3,7,8-tetrachlorodibenzo-p-dioxin) and all other organic pollutants were undetected in the effluent and receiving water.

Water quality criteria have been established for forty-three of the volatile and semi-volatile organic compounds, as well as pesticides, at concentrations less than current laboratory minimum levels.

For pollutants that have minimum levels established at concentrations below their water quality objectives, there is no reasonable potential, based upon current analytical data, for an exceedance of a water quality objective in Spanish Creek. Further monitoring is required in the Monitoring and Reporting Program to confirm this finding.

For the forty-three compounds that have minimum levels established at concentrations higher than their water quality objectives, the Regional Board finds, based on current Plant operations and the nature of the waste treated, that these forty-three organic substances will not be present in concentrations in the Plant effluent that cause or contribute to violations of water quality objectives. Further monitoring is required, as described below, and in the Monitoring and Reporting Program to support this finding. If and when minimum levels for these compounds are lowered, or additional data warrants, this permit may be reopened to establish effluent limitations for those compounds determined to have reasonable potential to exceed water quality objectives.

INTERIM EFFLUENT LIMITATIONS

The SIP requires interim effluent limitations with the establishment of a compliance schedule for meeting final effluent limits if final effluent limits cannot be met immediately: In accordance with the SIP, the compliance schedule must include: 1) series of required actions to be undertaken for the purpose of achieving a CTR criterion and/or effluent limitations based on a CTR criterion; 2) a schedule for completion of each required action in the shortest practicable time possible; 3) a final compliance date; and 4) when the compliance schedule exceeds one year from the date of permit issuance, inclusion of interim limitations with specific compliance dates.

The SIP states, in Sections 2.1 and 2.2;

“The discharger shall submit to the RWQCB the following justification before compliance schedules may be authorized in a permit: (a) documentation that diligent efforts have been made to quantify pollutant levels in the discharge and the sources of the pollutant in the waste stream, and the results of those efforts; (b) documentation of source control and/or pollution minimization efforts currently underway or completed; (c) a proposed schedule for additional or future source control measures, pollutant minimization actions, or waste treatment (i.e., facility upgrades); and (d) a demonstration that the proposed schedule is as short as practicable.”

This Order requires the discharger to submit a justification demonstrating conformance with a) through d) above. The Order also requires the Discharger to provide interim progress reports semi-annually.

Under the SIP, the Regional Board is also required to establish interim numeric limitations based upon current plant performance if the compliance date exceeds one year from the date of permit issuance. Interim numeric limitations are included in the Order.

FLOW LIMITATIONS:

The monthly average daily dry weather flow limitation of 1.60 mgd is based on the design capacity of the treatment facility and the flow allowed in the previous permit.

SLUDGE DISPOSAL

The Order contains provisions requiring the Discharger to comply with current federal and state laws and regulations for disposal of sewage sludge. The facility intends to remove sludge from the treatment works on an unscheduled basis. 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 the draft Order are based on water quality objectives contained in the Basin Plan for the North Fork of the Feather River.

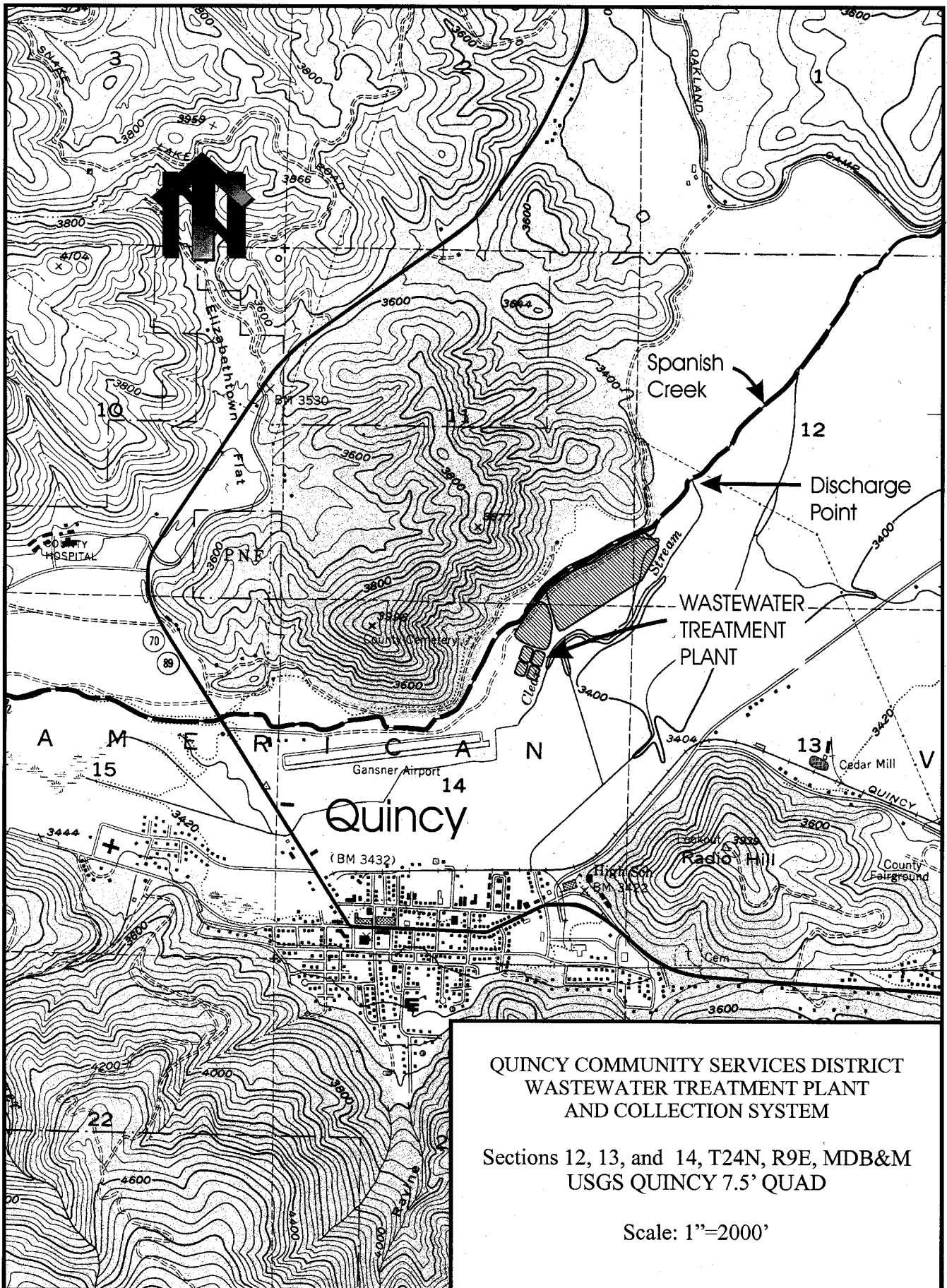
PROCEDURES ON REACHING FINAL DECISION ON DRAFT PERMIT

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 Ronald S. Dykstra at the Regional Water Quality Control Board in Redding at (530) 224-4858, dykstrr@rb5r.swrcb.ca.gov, or at 415 Knollcrest Dr, Suite 100, Redding, CA, 96002.

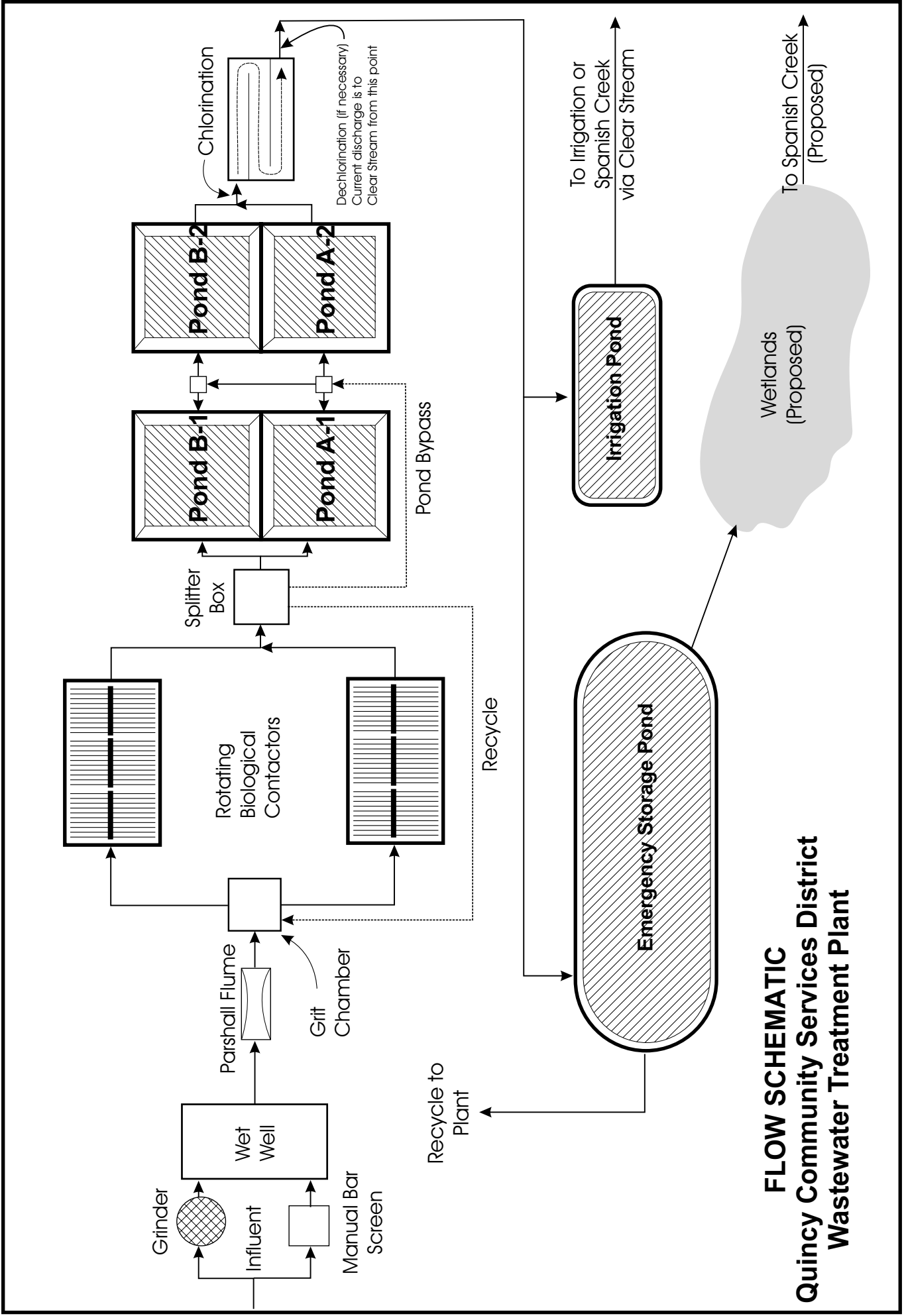
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QUINCY COMMUNITY SERVICES DISTRICT
WASTEWATER TREATMENT PLANT
AND COLLECTION SYSTEM

Sections 12, 13, and 14, T24N, R9E, MDB&M
USGS QUINCY 7.5' QUAD

Scale: 1"=2000'



FLOW SCHEMATIC
Quincy Community Services District
Wastewater Treatment Plant

**ATTACHMENT C-ORDER NO. R5-2004-0152
 QUINCY COMMUNITY SERVICES DISTRICT
 WASTEWATER TREATMENT PLANT AND COLLECTION SYSTEM,
 PLUMAS COUNTY**

Example Calculation Of Effluent Limits For Copper, Lead, and Silver

Description	Copper		Lead		Silver	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Coefficient of Variation ¹ (CV)	0.60		0.60		0.60	
Maximum measured Concentration (ug/L)	16.8		0.7		0.5	
Criteria	Acute	Chronic	Acute	Chronic	Acute	Chronic
Hardness (mg/L as CaCO ₃) ²	24	24	24	24	24	NA
Criteria (ug/L, dissolved) ³	3.5	2.65	13.3	0.52	0.30	NA
Translator ⁴	0.960	0.960	0.999	0.999	0.85	NA
Criteria (ug/L, total recoverable) ⁵	3.65	2.76	13.3	0.52	0.35	NA
Effluent Limit Calculations						
Dilution Credit ⁶	0.0	0.0	0.0	0.0	0.0	NA
Effluent Concentration Allowance(ug/L) ⁷	3.65	2.76	13.3	0.52	0.35	NA
ECA Multiplier ⁸	0.32	0.53	0.32	0.53	0.32	NA
Long-Term Average (ug/L) ⁹	1.2	1.5	4.3	0.27	0.11	NA
AMEL Multiplier ¹⁰	1.55	*	*	1.55	1.55*	NA
Average Monthly Effluent Limit (ug/L) ¹⁰	1.8	*	*	0.42	0.17	NA
MDEL Multiplier ¹⁰	3.11	*	*	3.11	3.11*	NA
Max. Daily Effluent Limit (ug/L) ¹⁰	3.6			0.85	0.35	NA

¹ A CV of 0.6 is used in accordance with the SIP, 1.4 (B), step 3., because there are less than 10 data points.

² The lowest hardness detected in the North Fork of the Feather River has been used, as it results in the most conservative effluent limits. The Discharger may use the measured hardness of Spanish Creek downstream of the discharge for substitution into the equations establishing effluent limitations. This hardness may not be equal to 24 mg/L, based upon background hardness in Spanish Creek and hardness added by the discharge.

³ The dissolved criterion is calculated by: copper CMC = CF x e^{0.9422[ln (hardness)]-1.700}; copper CCC = CF x e^{0.8545[ln (hardness)]-1.702}; lead CMC = CF x e^{1.273[ln (hardness)]-1.460}; lead CMC = CF x e^{1.273[ln (hardness)]-4.705}; and silver CMC = CF x e^{1.72[ln (hardness)]-6.52}; as given in Table 1 of the CTR, where CF is the (non-site-specific) conversion factor from Table 2 of the CTR.

⁴ The translator is used to convert the dissolved criterion to total recoverable criterion. CTR Table 2 conversion factors are used for translators where no studies have been performed by the Discharge to establish site-specific translators. In table 2, the translator is given as 0.96 for both the CCC and CMC for copper, by the formula 1.46203-[(ln{hardness})(0.145712)] for both the CCC and CMC for lead, and as 0.85 for the CMC for silver. The Discharger may submit, within two years of the adoption of this Order, site specific translators for the Board's consideration.

⁵ The total recoverable criterion is obtained by dividing the translator into the dissolved criterion.

⁶ There is inadequate information on dilution in the receiving water, and no dilution credit is given. After the Discharge performs the appropriate studies to determine available dilution, and installs an outfall diffuser, as necessary, this Order may be reopened and modified effluent limits established.

⁷ The effluent concentration allowance is calculated by adding the criterion to the product of the dilution credit and the difference of the background concentration and the criterion. Because there is currently no dilution credit allowed, the ECA equals the criterion.

⁸ The ECA multiplier is obtained from table 1 of the SIP.

⁹ The long-term average values are obtained by multiplying the respective criterion by the ECA multiplier.

¹⁰ Subsequent to determination of the long term averages for both chronic and acute criteria, the most stringent (lowest) value is selected. This value is multiplied by the AMEL and MDEL multipliers, found in Table 2 of the SIP, to determine the Average Monthly Effluent limit and the Maximum Daily effluent limit.

*For copper, the acute long-term average value governs the calculation, and for lead the chronic long-term value governs, therefore no values are given at these table locations. For silver, there is no applicable chronic criterion.

SIP Section 1.4 Maximum Daily Effluent Daily Effluent Limitations (MDELs) and Average Monthly Effluent Limitations (AMELs) as Total Copper Using CTR Water Quality Hardness-Dependent Values of Criterion Maximum Concentrations (CMCs) and Criterion Continuous Concentrations (CCCs) for the Protection of Freshwater Aquatic Life

Upstream Receiving Water Hardness (mg/L as CaCO ₃)	CMC _{dissolved} ¹ 1-hour Average (ig/L)	CCC _{dissolved} ² 4-day Average (ig/L)	LTA ³ (acute) (ig/L)	LTA ⁴ (chronic) (ig/L)	MDEL ⁵ (ig/L)	AMEL ⁶ (ig/L)
<21	Must Calculate					
21	3.1	2.4	1.04	1.32	3.2	1.6
22	3.2	2.5	1.07	1.37	3.3	1.7
23	3.4	2.6	1.14	1.43	3.5	1.8
24	3.5	2.6	1.17	1.43	3.6	1.8
25	3.6	2.7	1.2	1.48	3.7	1.9
26	3.8	2.8	1.27	1.54	3.9	2
27	3.9	2.9	1.3	1.59	4	2
28	4.1	3	1.37	1.65	4.3	2.1
29	4.2	3.1	1.4	1.7	4.4	2.2
30	4.3	3.2	1.44	1.76	4.5	2.2
31	4.5	3.3	1.5	1.81	4.7	2.3
32	4.6	3.4	1.54	1.87	4.8	2.4
33	4.7	3.5	1.57	1.92	4.9	2.4
34	4.9	3.6	1.64	1.98	5.1	2.5
35	5	3.7	1.67	2.03	5.2	2.6
36	5.1	3.7	1.71	2.03	5.3	2.7
37	5.3	3.8	1.77	2.09	5.5	2.7
38	5.4	3.9	1.81	2.14	5.6	2.8
39	5.5	4	1.84	2.2	5.7	2.9
40	5.7	4.1	1.91	2.25	5.9	3
41	5.8	4.2	1.94	2.31	6	3
42	5.9	4.3	1.97	2.36	6.1	3.1
43	6.1	4.4	2.04	2.42	6.3	3.2
44	6.2	4.4	2.07	2.42	6.4	3.2
45	6.3	4.5	2.11	2.47	6.6	3.3
46	6.5	4.6	2.17	2.53	6.7	3.4
47	6.6	4.7	2.21	2.58	6.9	3.4
48	6.7	4.8	2.24	2.64	7	3.5
49	6.9	4.9	2.31	2.69	7.2	3.6
50	7	5	2.34	2.74	7.3	3.6
51	7.1	5	2.37	2.74	7.4	3.7
52	7.3	5.1	2.44	2.8	7.6	3.8
53	7.4	5.2	2.47	2.85	7.7	3.8
54	7.5	5.3	2.51	2.91	7.8	3.9
55	7.7	5.4	2.57	2.96	8	4
56	7.8	5.5	2.61	3.02	8.1	4
57	7.9	5.5	2.64	3.02	8.2	4.1
58	8	5.6	2.68	3.07	8.3	4.2
59	8.2	5.7	2.74	3.13	8.5	4.2
≥60	Must Calculate					

¹ CMC_{Dissolved} (1-hour average) = 0.960 x exp^{(0.9422)(ln hardness)-1.700}
² CCC_{Dissolved} (4-day average) = 0.960 x exp^{(0.8545)(ln hardness)-1.702}
³ LTA_{acute} = ECA x 0.321 (where ECA = CMC_{Dissolved}/0.960)
⁴ LTA_{chronic} = ECA x 0.527 (where ECA = CCC_{Dissolved}/0.960)
⁵ MDEL = LTA_{acute} x 3.11 (use lower of LTA_{acute} and LTA_{chronic})
⁶ AMEL = LTA_{acute} x 1.55 (use lower of LTA_{acute} and LTA_{chronic})

SIP Section 1.4 Maximum Daily Effluent Daily Effluent Limitations (MDELs) and Average Monthly Effluent Limitations (AMELs) as Total Lead Using CTR Water Quality Hardness-Dependent Values of Criterion Maximum Concentrations (CMCs) and Criterion Continuous Concentrations (CCCs) for the Protection of Freshwater Aquatic Life

Upstream Receiving Water Hardness (mg/L as CaCO ₃)	CMC _{dissolved} ¹ 1-hour Average (ig/L)	CCC _{dissolved} ² 4-day Average (ig/L)	LTA ³ (acute) (ig/L)	LTA ⁴ (chronic) (ig/L)	MDEL ⁵ (ig/L)	AMEL ⁶ (ig/L)
<21	Must Calculate					
21	9.8	0.44	3.09	0.23	0.72	0.36
22	12	0.47	3.81	0.24	0.75	0.37
23	12.6	0.49	4.02	0.26	0.81	0.4
24	13.3	0.52	4.27	0.27	0.84	0.42
25	13.9	0.54	4.49	0.29	0.9	0.45
26	14.5	0.57	4.71	0.3	0.93	0.47
27	15.1	0.59	4.94	0.32	1	0.5
28	15.8	0.61	5.19	0.33	1.03	0.51
29	16.4	0.64	5.42	0.35	1.09	0.54
30	17	0.66	5.65	0.36	1.12	0.56
31	17.7	0.69	5.91	0.38	1.18	0.59
32	18.3	0.71	6.14	0.39	1.21	0.6
33	19	0.74	6.4	0.41	1.28	0.64
34	19.6	0.76	6.64	0.42	1.31	0.65
35	20.3	0.79	6.9	0.44	1.37	0.68
36	20.9	0.81	7.14	0.45	1.4	0.7
37	21.6	0.84	7.41	0.47	1.46	0.73
38	22.2	0.87	7.65	0.49	1.52	0.76
39	22.9	0.89	7.92	0.51	1.59	0.79
40	23.5	0.92	8.16	0.52	1.62	0.81
41	24.2	0.94	8.44	0.54	1.68	0.84
42	24.8	0.97	8.68	0.56	1.74	0.87
43	25.5	0.99	8.96	0.57	1.77	0.88
44	26.1	1.02	9.2	0.59	1.83	0.91
45	26.8	1.04	9.48	0.6	1.87	0.93
46	27.5	1.07	9.76	0.62	1.93	0.96
47	28.1	1.10	10.01	0.64	1.99	0.99
48	28.8	1.12	10.3	0.66	2.05	1.02
49	29.5	1.15	10.58	0.68	2.11	1.05
50	30.1	1.17	10.83	0.69	2.15	1.07
51	30.8	1.20	11.12	0.71	2.21	1.1
52	31.5	1.23	11.41	0.73	2.27	1.13
53	32.1	1.25	11.66	0.75	2.33	1.16
54	32.8	1.28	11.95	0.77	2.39	1.19
55	33.5	1.31	12.25	0.79	2.46	1.22
56	34.2	1.33	12.54	0.8	2.49	1.24
57	34.8	1.36	12.8	0.82	2.55	1.27
58	35.5	1.38	13.09	0.84	2.61	1.3
59	36.2	1.41	13.39	0.86	2.67	1.33
≥60	Must Calculate					

¹ CMC_{Dissolved} (1-hour average) = 1.46203 - [(ln{hardness})(0.145712)] x exp^{(1.273)(ln hardness) - 1.460}

² CCC_{Dissolved} (4-day average) = 1.46203 - [(ln{hardness})(0.145712)] x exp^{(1.273)(ln hardness) - 4.705}

³ LTA_{acute} = ECA x 0.321 (where ECA = CMC_{Dissolved} / 1.46203 - [(ln{hardness})(0.145712)])

⁴ LTA_{chronic} = ECA x 0.527 (where ECA = CCC_{Dissolved} / 1.46203 - [(ln{hardness})(0.145712)])

⁵ MDEL = LTA_{acute} x 3.11 (use lower of LTA_{acute} and LTA_{chronic})

⁶ AMEL = LTA_{acute} x 1.55 (use lower of LTA_{acute} and LTA_{chronic})

SIP Section 1.4 Maximum Daily Effluent Daily Effluent Limitations (MDELs) and Average Monthly Effluent Limitations (AMELs) as Total Silver Using CTR Water Quality Hardness-Dependent Values of Criterion Maximum Concentrations (CMCs) for the Protection of Freshwater Aquatic Life

Upstream Receiving Water Hardness (mg/L as CaCO ₃)	CMC _{dissolved} ¹ 1-hour Average (ig/L)	CCC _{dissolved} 4-day Average (ig/L)	LTA ² (acute) (ig/L)	LTA (chronic) (ig/L)	MDEL ³ (ig/L)	AMEL ⁴ (ig/L)
<21	Must Calculate					
21	0.24	NA	0.09	NA	0.28	0.14
22	0.26	NA	0.1	NA	0.31	0.16
23	0.28	NA	0.11	NA	0.34	0.17
24	0.30	NA	0.11	NA	0.34	0.17
25	0.32	NA	0.12	NA	0.37	0.19
26	0.34	NA	0.13	NA	0.4	0.2
27	0.36	NA	0.14	NA	0.44	0.22
28	0.39	NA	0.15	NA	0.47	0.23
29	0.41	NA	0.15	NA	0.47	0.23
30	0.43	NA	0.16	NA	0.5	0.25
31	0.46	NA	0.17	NA	0.53	0.26
32	0.49	NA	0.19	NA	0.59	0.29
33	0.51	NA	0.19	NA	0.59	0.29
34	0.54	NA	0.2	NA	0.62	0.31
35	0.57	NA	0.22	NA	0.68	0.34
36	0.6	NA	0.23	NA	0.72	0.36
37	0.62	NA	0.23	NA	0.72	0.36
38	0.65	NA	0.25	NA	0.78	0.39
39	0.68	NA	0.26	NA	0.81	0.4
40	0.71	NA	0.27	NA	0.84	0.42
41	0.74	NA	0.28	NA	0.87	0.43
42	0.78	NA	0.29	NA	0.9	0.45
43	0.81	NA	0.31	NA	0.96	0.48
44	0.84	NA	0.32	NA	1	0.5
45	0.87	NA	0.33	NA	1.03	0.51
46	0.91	NA	0.34	NA	1.06	0.53
47	0.94	NA	0.35	NA	1.09	0.54
48	0.98	NA	0.37	NA	1.15	0.57
49	1.01	NA	0.38	NA	1.18	0.59
50	1.05	NA	0.4	NA	1.24	0.62
51	1.08	NA	0.41	NA	1.28	0.64
52	1.12	NA	0.42	NA	1.31	0.65
53	1.16	NA	0.44	NA	1.37	0.68
54	1.2	NA	0.45	NA	1.4	0.7
55	1.23	NA	0.46	NA	1.43	0.71
56	1.27	NA	0.48	NA	1.49	0.74
57	1.31	NA	0.49	NA	1.52	0.76
58	1.35	NA	0.51	NA	1.59	0.79
59	1.39	NA	0.52	NA	1.62	0.81
³ 60	Must Calculate					

¹ CMC_{Dissolved} (1-hour average) = 0.960 x exp^{(1.72)(ln hardness)-6.52}

² LTA_{acute} = ECA x 0.321 (where ECA = CMC_{Dissolved}/0.85)

³ MDEL = LTA_{acute} x 3.11

⁴ AMEL = LTA_{acute} x 1.55

⁵ There is no CCC for silver

ATTACHMENT G, ORDER NO. R5-2004-0152
 QUINCY COMMUNITY SERVICES DISTRICT
 WASTEWATER TREATMENT PLANT AND COLLECTION SYSTEM
 PLUMAS COUNTY

List of Priority Pollutants

1	Antimony	41	1,1,1-Trichloroethane	80	Dimethyl phthalate
2	Arsenic	42	1,1,2-Trichloroethane	81	Di-n-Butyl Phthalate
3	Beryllium	43	Trichloroethylene (TCE)	82	2,4-Dinitrotoluene
4	Cadmium	44	Vinyl chloride	83	2,6-Dinitrotoluene
5a	Chromium (III)	45	2-Chlorophenol	84	Di-n-Octyl Phthalate
5b	Chromium (VI)	46	2,4-Dichlorophenol	85	1,2-Diphenylhydrazine
6	Copper	47	2,4-Dimethylphenol	86	Fluoranthene
7	Lead	48	2-Methyl-4,6-	87	Fluorene
8	Mercury		Dinitrophenol	88	Hexachlorobenzene
9	Nickel	49	2,4-Dinitrophenol	89	Hexachlorobutadiene
10	Selenium	50	2-Nitrophenol	90	Hexachlorocyclopentadiene
11	Silver	51	4-Nitrophenol	91	Hexachloroethane
12	Thallium	52	3-Methyl-4-Chlorophenol	92	Indeno(1,2,3-c,d)pyrene
13	Zinc	53	Pentachlorophenol	93	Isophorone
14	Cyanide	54	Phenol	94	Naphthalene
15	[asbestos testing not required]	55	2,4,6-Trichlorophenol	95	Nitrobenzene
16	[dioxin testing not required]	56	Acenaphthene	96	N-Nitrosodimethylamine
17	Acrolein	57	Acenaphthylene	97	N-Nitrosodi-n-Propylamine
18	Acrylonitrile	58	Anthracene	98	N-Nitrosodiphenylamine
19	Benzene	59	Benzidine	99	Phenanthrene
20	Bromoform	60	Benzo(a)Anthracene	100	Pyrene
21	Carbon tetrachloride	61	Benzo(a)pyrene	101	1,2,4-Trichlorobenzene
22	Chlorobenzene	62	Benzo(b)fluoranthene	102	Aldrin
23	Chlorodibromomethane	63	Benzo(g,h,i)perylene	103	alpha-BHC
24	Chloroethane	64	Benzo(k)fluoranthene	104	beta-BHC
25	2-Chloroethylvinyl Ether	65	Bis(2-chloroethoxy) methane	105	gamma-BHC (Lindane)
26	Chloroform	66	Bis(2-chloroethyl) ether	106	delta-BHC
27	Dichlorobromomethane	67	Bis(2-chloroisopropyl) ether	107	Chlordane
28	1,1-Dichloroethane	68	Bis(2-Ethylhexyl) phthalate	108	4,4'-DDT
29	1,2-Dichloroethane	69	4-Bromophenyl phenyl ether	109	4,4'-DDE
30	1,1-Dichloroethylene			110	4,4'-DDD
31	1,2-Dichloropropane			111	Dieldrin
32	1,3-Dichloropropylene	70	Butylbenzyl Phthalate	112	alpha-Endosulfan
33	Ethylbenzene	71	2-Chloronaphthalene	113	beta-Endosulfan
34	Methyl Bromide	72	4-Chlorophenyl Phenyl Ether	114	Endosulfan Sulfate
35	Methyl Chloride			115	Endrin
36	Methylene Chloride	73	Chrysene	116	Endrin Aldehyde
37	1,1,2,2-Tetrachloroethane	74	Dibenzo(a,h)Anthracene	117	Heptachlor
38	Tetrachloroethylene (PCE)	75	1,2-Dichlorobenzene	118	Heptachlor epoxide
39	Toluene	76	1,3-Dichlorobenzene	119	Polychlorinated biphenyls (PCBs)
40	1,2-Trans-Dichloroethylene	77	1,4-Dichlorobenzene	-125	
		78	3,3'-Dichlorobenzidine	126	Toxaphene
		79	Diethyl phthalate		