



California Sportfishing Protection Alliance

"An Advocate for Fisheries, Habitat and Water Quality"

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22 October 2006

Mr. Robert Schneider, Chairman
Ms. Pamela Creedon, Executive Officer
Mr. Kenneth Landau, Assistant Executive Officer
Mr. James C. Pedri, Assistant Executive Officer
Ms. Mary L. Randall, Senior WRC Engineer
Mr. Ron Dykstra, WRC Engineer
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6144

VIA: Electronic Submission
Hardcopy if Requested

RE: Waste Discharge Requirements (NPDES Permit No. CA0081744) for Grizzly Lake Resort Improvement District, Delleker Wastewater Treatment Plant, Plumas County

Dear Messrs. Schneider, Landau, Pedri, Dykstra and Mesdames Creedon, Randall:

The California Sportfishing Protection Alliance and Watershed Enforcers (CSPA) has reviewed the Central Valley Regional Water Quality Control Board's (Regional Board) tentative NPDES Permit No. CA0078441 (Order or Permit) for Grizzly Lake Resort Improvement District, Delleker Wastewater Treatment Plant, Plumas County (Discharger) and submits the following comments.

Despite the fact that the public comment period closes on 22 October 2006, the proposed Permit is identified on the agenda as an uncontested item. CSPA requests the Permit be removed from the Uncontested Items Calendar and seeks status as a designated party for this proceeding. CSPA is a 501(c)(3) public benefit conservation and research organization established in 1983 for the purpose of conserving, restoring, and enhancing the state's water quality and fishery resources and their aquatic ecosystems and associated riparian habitats. CSPA has actively promoted the protection of water quality and fisheries throughout California before state and federal agencies, the State Legislature and Congress and regularly participates in administrative and judicial proceedings on behalf of its members to protect, enhance, and restore California's degraded surface and ground waters and associated fisheries. CSPA members reside, boat, fish and recreate in and along waterways throughout the Central Valley, including Plumas County.

Our specific comments follow:

1. The discussion of Electrical Conductivity (EC) does not acknowledge that there is no assimilative capacity for the wastewater discharge and fails to contain an Effluent Limitation in violation of Federal Regulation 40 CFR 122.44

The proposed Permit does not contain an Effluent Limitation for EC. The Basin Plan contains a site specific water quality objective for the middle fork of the Feather River of 150 $\mu\text{mhos/cm}$. The proposed Permit Fact Sheet, Determining the Need for WQBELs (h), page F-17, states in part that: EC "...upstream of the treatment plant have varied from 135 $\mu\text{mhos/cm}$ to 150 $\mu\text{mhos/cm}$." The Fact Sheet verifies that there is no assimilative capacity for EC, the middle fork of the Feather River has been measured at the Basin Plan water quality objective. The Fact Sheet contains blanks for the numerical discharge EC concentrations. The same section of the Fact Sheet states in part that: "With complete mixing of the effluent in the River, the increase in conductivity in the River would be a maximum of less than 3 $\mu\text{mhos/cm}$..." Since the receiving stream has been measured at the objective, clearly a discharge that could raise the EC by 3 $\mu\text{mhos/cm}$ would cause a violation of the water quality objective. The proposed Permit does not comply with Federal Regulation 40 CFR 122.44 for failing to include a protective Effluent Limitation when there is a reasonable potential to exceed a water quality objective for EC. The California Water Code (CWC), Section 13377 states in part that: "...the state board or the regional boards shall...issue waste discharge requirements...which apply and ensure compliance with ...water quality control plans, or for the protection of beneficial uses..."

2. The proposed Permit grants a mixing zone for pathogens, turbidity and dissolved oxygen in violation of Federal Regulation 40 CFR 122.44 and CWC 13377; the receiving water sampling is incapable of detecting violations of Receiving Waster Limitations

The California Water Code (CWC), Section 13377 states in part that: "...the state board or the regional boards shall...issue waste discharge requirements...which apply and ensure compliance with ...water quality control plans, or for the protection of beneficial uses..." Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

The proposed Permit discusses in great detail, Fact Sheet pages F-11, 12 and 13, the requirements for a mixing zone. *The Regional Water Board's Basin Plan allows mixing zones provided the Discharger has demonstrated that the mixing zone will not adversely impact beneficial uses.* The Basin Plan further requires that in determining the size of a mixing zone, the Regional Water Board will consider the applicable procedures in USEPA's *Water Quality Standards Handbook* and the *Technical Support Document for Water Quality Based Toxics Control (TSD)*. It is the Regional Water Board's discretion whether to allow a mixing zone. The SIP, in part, states that mixing zones shall not:

- Compromise the integrity of the entire water body.

- Cause acutely toxic conditions to aquatic life passing through the mixing zone.
- Restrict passage of aquatic life.
- Adversely impact biologically sensitive or critical habitats, including but not limited to, habitat of species listed under Federal or State endangered species laws.
- Dominate the receiving water body.
- Overlap a mixing zone from a different outfall.

USEPA's Water Quality Standards Handbook (WQSH) states that States may, at their discretion, allow mixing zones. The WQSH recommends that mixing zones be defined on a case-by-case basis after it has been determined that the assimilative capacity of the receiving stream can safely accommodate the discharge. This assessment should take into consideration the physical, chemical, and biological characteristics of the discharge and the receiving stream; the life history of and behavior of organisms in the receiving stream; and the desired uses of the waters. Mixing zones should not be allowed where they may endanger critical areas (e.g., drinking water supplies, recreational areas, breeding grounds and areas with sensitive biota). USEPA's TSD states, in part in Section 4.3.1, that mixing zones should not be permitted where they may endanger critical areas.

Mixing zones must be analyzed on a pollutant-by-pollutant basis and granted only where there is adequate assimilative capacity for the individual pollutant in the receiving stream. The proposed Permit states that it is not granting mixing zones, however this is not the case.

a. Pathogens

The proposed Permit Fact Sheet, page F-14, *Evaluation of Available Dilution for Pathogen/Disinfect Considerations*, states that: "The quality of the discharge must be protective of drinking water/municipal supply, body contact recreation, and agricultural supply within as short a distance downstream of the outfall as possible." Municipal and domestic supply, agricultural irrigation, and body contact water recreation are beneficial uses of the receiving stream.

The Regional Board frequently cites a letter dated 8 April 1999, from the California Department of Health Services indicating that DHS would consider wastewater discharged to water bodies with identified beneficial uses of irrigation or contact recreation and where the wastewater receives dilution of more than 20:1 to be adequately disinfected if the effluent coliform concentration does not exceed 23 MPN/100 ml as a 7-day median and if the effluent coliform concentration does not exceed 240 MPN/100 ml more than once in any 30 day period. Without 20:1 dilution the Regional Water Board finds that the wastewater must be treated to tertiary standards (filtered), or equivalent, to protect contact recreational and food crop irrigation uses.

As stated above the discharger discharges through a pipe, without a diffuser, placed on the side of the riverbank. Wastewater discharges through a discrete pipeline outfall to surface water frequently hug the bank or stay separated from the principal water body. In this case, there is no knowledge when or where a twenty-to-one dilution occurs. Therefore the Regional Board is granting a mixing zone from the point of discharge to some unknown point downstream for pathogens. The receiving stream from the point of discharge to some unknown point downstream is not safe for municipal and domestic supply, agricultural irrigation, and body contact water recreation beneficial uses of the receiving stream. The Monitoring and Reporting Program states that the instream monitoring location to determine compliance with Receiving Water Limitations is in the middle fork of the Feather River 500 feet downstream of the point of discharge, however it is unknown whether the sampling location captures the wastewater/receiving stream mix.

The proposed Permit proposes a mixing zone without any analysis or discussion of the fact that beneficial uses in the North Fork of the Feather River are not protected from the point of discharge to some unknown point downstream. People swimming in the river at this location could be swimming in undiluted secondary wastewater effluent.

b. Turbidity

The proposed Permit discusses in great detail that the Discharger has been unable to meet a total suspended solids (TSS) Effluent Limitation of 45 mg/l. A wastewater discharge with a TSS of 45 mg/l would be fairly turbid. The proposed Permit contains receiving water limitations for turbidity based on the turbidity of the receiving stream. The middle fork of the Feather River is a relatively pristine waterbody with low turbidity. As stated above the discharger discharges through a pipe, without a diffuser, placed on the side of the riverbank. Wastewater discharges through a discrete pipeline outfall to surface water frequently hug the bank or stay separated from the principal water body. In this case, there is no knowledge when or where a complete mix occurs. The proposed Permit grants a mixing zone for turbidity without any analysis of the Basin Plan or SIP requirements for mixing zones and does not discuss the impacts of what are likely ongoing violations of the Receiving Water Limitation for turbidity. The Monitoring and Reporting Program states that the instream monitoring location to determine compliance with receiving water Limitations is in the middle fork of the Feather River 500 feet downstream of the point of discharge, however it is unknown whether the sampling location captures the wastewater/receiving stream mix.

c. Dissolved Oxygen

The proposed Permit, Land Discharge Specifications – Ponds, requires that the dissolved oxygen level in the wastewater treatment ponds not drop below

1.0 mg/l. The proposed Permit, Receiving Water Limitations, requires that the discharge shall not cause the receiving water dissolved oxygen concentration to fall below 7.0 mg/l. As stated above the discharger discharges through a pipe, without a diffuser, placed on the side of the riverbank. Wastewater discharges through a discrete pipeline outfall to surface water frequently hug the bank or stay separated from the principal water body. In this case, there is no knowledge when or where a complete mix occurs. The proposed Permit grants a mixing zone for dissolved oxygen without any analysis of the Basin Plan or SIP requirements for mixing zones and does not discuss the impacts of what are likely ongoing violations of the Receiving Water Limitation for dissolved oxygen. The Monitoring and Reporting Program states that the instream monitoring location to determine compliance with receiving water Limitations is in the middle fork of the Feather River 500 feet downstream of the point of discharge, however it is unknown whether the sampling location captures the wastewater/receiving stream mix.

As discussed above, the proposed permit grants mixing zones without any analysis and in violation of SIP and Basin Plan requirements. The proposed Permit allows unspecified areas where the beneficial uses of the receiving stream are unprotected. The proposed Permit, as currently written, violates CWC Section 13377 which states in part that: "...the state board or the regional boards shall...issue waste discharge requirements ...which apply and ensure compliance with ...water quality control plans, or for the protection of beneficial uses..." and Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. The proposed Permit can be corrected by requiring the Discharger provide best practicable treatment and control of the discharge (BPTC), tertiary treatment.

3. The proposed Permit fails to contain an Effluent Limitation for bis(2-ethylhexyl)phthalate in violation of the California Toxics Rule, Federal Regulations (40 CFR 122.44), the California Water Code (CWC), Section 13377, and the States Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP)

The maximum observed effluent (MEC) concentration for bis(2-ethylhexyl)phthalate was 4.0 $\mu\text{g/l}$, Table F-3, which exceeds the California Toxics Rule (CTR) water quality standard of 1.8 $\mu\text{g/l}$. In accordance with Federal Regulations, 40 CFR 122.44, the Regional Board is required to establish an effluent limitation if a pollutant is measured in the effluent which presents a reasonable potential to exceed a water quality standard of objective. In accordance with the SIP, Section 1.3, since the maximum effluent concentration exceeded a water quality standard, an effluent limitation is required. California Water Code, section 13377, requires that: "Notwithstanding any other provision of this division, the state board and the regional boards shall, as required or authorized by the Federal Water Pollution Control Act, as amended, issue waste discharge and dredged or fill material permits which apply and ensure compliance with

all applicable provisions of the act and acts amendatory thereof or supplementary, thereto, together with any more stringent effluent standards or limitations necessary to implement water quality control plans, or for the protection of beneficial uses, or to prevent nuisance.”

The measured concentrations of bis(2-ethylhexyl)phthalate at 4.0 $\mu\text{g/l}$ clearly exceed the CTR water quality standard of 1.8 $\mu\text{g/l}$ and in accordance with Federal and State Regulations and the SIP, effluent limitations are required. Federal Regulation, 40 CFR 122.4 (a), (d) and (g) require that no permit may be issued when the conditions of the permit do not provide for compliance with the applicable requirements of the CWA, or regulations promulgated under the CWA, when imposition of conditions cannot ensure compliance with applicable water quality requirements and for any discharge inconsistent with a plan or plan amendment approved under Section 208(b) of the CWA.

4. The proposed Permit fails to contain an Effluent Limitation for mercury in violation of the California Toxics Rule, Federal Regulations (40 CFR 122.44), the California Water Code (CWC), Section 13377, and the States Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP)

The maximum observed effluent (MEC) concentration for mercury was 3.84 $\mu\text{g/l}$, Table F-3, which exceeds the California Toxics Rule (CTR) water quality standard of 0.050 $\mu\text{g/l}$. In accordance with Federal Regulations, 40 CFR 122.44, the Regional Board is required to establish an effluent limitation if a pollutant is measured in the effluent which presents a reasonable potential to exceed a water quality standard of objective. In accordance with the SIP, Section 1.3, since the maximum effluent concentration exceeded a water quality standard, an effluent limitation is required. California Water Code, section 13377, requires that: “Notwithstanding any other provision of this division, the state board and the regional boards shall, as required or authorized by the Federal Water Pollution Control Act, as amended, issue waste discharge and dredged or fill material permits which apply and ensure compliance with all applicable provisions of the act and acts amendatory thereof or supplementary, thereto, together with any more stringent effluent standards or limitations necessary to implement water quality control plans, or for the protection of beneficial uses, or to prevent nuisance.”

The measured concentrations of mercury at 3.84 $\mu\text{g/l}$ clearly exceed the CTR water quality standard of 0.050 $\mu\text{g/l}$ and in accordance with Federal and State Regulations and the SIP, effluent limitations are required. Federal Regulation, 40 CFR 122.4 (a), (d) and (g) require that no permit may be issued when the conditions of the permit do not provide for compliance with the applicable requirements of the CWA, or regulations promulgated under the CWA, when imposition of conditions cannot ensure compliance with applicable water quality requirements and for any discharge inconsistent with a plan or plan amendment approved under Section 208(b) of the CWA.

5. The proposed Permit does not contain an Effluent Limitation for ammonia in violation of Federal Regulations 40 CFR 122.44 and California Water Code, Section 13377

The proposed Permit is for a domestic wastewater treatment plant. Domestic wastewater treatment plants, by their nature, receive ammonia in concentrations ranging from 30 mg/l to 60 mg/l and present a reasonable potential to exceed the Basin Plan narrative toxicity water quality objective. Ammonia is toxic to aquatic life in fairly low concentrations. The Regional Board has a long-established history of including ammonia limitations in NPDES permits based on U.S. EPA's ambient criteria for the protection of freshwater aquatic life, which has established BPTC for POTWs. Failure to operate a wastewater treatment plant in a nitrification mode allows ammonia concentrations to pass through the system. The nitrification process can be a fairly unstable treatment process; even POTWs that employ nitrification should be limited for ammonia to ensure the system is properly operated. The California Water Code (CWC), Section 13377 states in part that: "...the state board or the regional boards shall...issue waste discharge requirements...which apply and ensure compliance with ...water quality control plans, or for the protection of beneficial uses..." Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter. Failure to include an effluent limitation for ammonia in the proposed permit violates 40 CFR 122.44 and CWC 13377.

6. The proposed Permit does not contain an Effluent Limitation for nitrate and nitrite in violation of Federal Regulations 40 CFR 122.44 and California Water Code, Section 13377

Untreated domestic wastewater contains ammonia. Nitrification is a biological process that converts ammonia to nitrite and nitrite to nitrate. Denitrification is a process that converts nitrate to nitrite or nitric oxide and then to nitrous oxide or nitrogen gas, which is then released to the atmosphere. Nitrate and nitrite are known to cause adverse health effects in humans. The Basin Plan's chemical constituents water quality objective prohibits chemical constituents in concentrations that exceed drinking water Maximum Contaminant Levels (MCLs) published in Title 22 of the California Code of Regulations or that adversely affect beneficial uses. Municipal and domestic water supply is a beneficial use of the Sacramento River. The California Department of Health Services (DHS) has adopted Primary Maximum Contaminant Levels (MCLs) for the protection of human health for nitrite and nitrate that are equal to 1 mg/l and 10 mg/l (measured as nitrogen), respectively. Title 22 CCR, Table 64431-A, also includes a primary MCL of 10,000 mg/l for the sum of nitrate and nitrite, measured as nitrogen. The discharge from the wastewater treatment plant has a reasonable potential to cause or contribute to an in-stream excursion above water quality standards for nitrite, and nitrate. Effluent limits for

nitrite and nitrate are properly based on the MCLs. Effluent Limitations for nitrite and nitrate must be included in the proposed Permit to assure the treatment process adequately nitrifies and denitrifies the waste stream to protect the beneficial uses of municipal and domestic supply. The California Water Code (CWC), Section 13377 states in part that: "...the state board or the regional boards shall...issue waste discharge requirements...which apply and ensure compliance with ...water quality control plans, or for the protection of beneficial uses..." Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Drinking water MCLs are included in the Basin Plan Chemical Constituents water quality objective by reference. Failure to include an effluent limitation for nitrate in the proposed permit violates 40 CFR 122.44 and CWC 13377.

7. The proposed Permit does not contain an Effluent Limitation for oil and grease in violation of Federal Regulations 40 CFR 122.44 and California Water Code, Section 13377

The proposed Permit is for a domestic wastewater treatment plant. Domestic wastewater treatment plants, by their nature, receive oil and grease in concentrations from home cooking and restaurants that present a reasonable potential to exceed the Basin Plan water quality objective for oil and grease (Basin Plan III-5.00). Confirmation sampling is not necessary to establish that domestic wastewater treatment systems contain oil and grease in concentrations that present a reasonable potential to exceed the water quality objective. The Central Valley Regional Board has a long established history of including oil and grease limitations in NPDES permits at 15 mg/l as a daily maximum and 10 mg/l as a monthly average, which has established BPTC for POTWs. The California Water Code (CWC), Section 13377 states in part that: "...the state board or the regional boards shall...issue waste discharge requirements...which apply and ensure compliance with ...water quality control plans, or for the protection of beneficial uses..." Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter. Failure to include an effluent limitation for oil and grease in the proposed permit violates 40 CFR 122.44 and CWC 13377.

Notwithstanding the fact that the Regional Board has an established history of including oil and grease limitations in NPDES permits at 15 mg/l as a daily maximum and 10 mg/l as a monthly average, we believe these limitations are not necessarily protective. The only guidance we were able to find supporting the 15/10 mg/l limit is an old 1974 EPA memo discussing technological-based limits for stormwater runoff from petroleum refineries and marketing terminals. The 15/10 mg/l standard is clearly inadequate in situations where reasonable potential analyses mandate a water quality-based limitation.

Oil and grease is highly toxic to aquatic life: toxic at concentrations as low as 0.1 mg/L and sublethal toxicities are reported at 10-100 $\mu\text{g/L}$. In fact, it has been shown that petroleum products can harm aquatic life at concentrations as low as 1 $\mu\text{g/l}$. Oil and grease is also persistent, bioaccumulative and highly toxic in sediment. The USEPA's water quality standard for oil and grease is stated as: "a) 0.01 of the lowest continuous flow 96-hour LC50 to several important freshwater and marine species, each having a demonstrated high susceptibility to oils and petrochemicals, b) Levels of oils or petrochemicals in the sediment which cause deleterious effects to the biota should not be allowed and c) surface waters shall be virtually free from floating nonpetroleum oils of vegetable or animal origin, as well as petroleum-derived oils." Goldbook, 1986, Quality Criteria for Water, EPA 440/5-86-001. A table summarizing lethal toxicities of various petroleum products to aquatic life can be found in EPA's 1976 Quality Criteria for Water (Redbook, pp 210-215). The Basin Plan's narrative limit for oil and grease is stated as "[w]aters 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." Basin Plan, III-5.00.

8. The Proposed Permit Contains an Inadequate Reasonable Potential by Using Incorrect Statistical Multipliers which would result in Effluent Limitations for selenium and zinc in violation of Federal Regulation 40 CFR 122.44 (d)(1)(ii)

Federal regulations, 40 CFR § 122.44(d)(1)(ii), state "when determining whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a State water quality standard, the permitting authority shall use procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent; this was not done for selenium and zinc. The reasonable potential analyses for selenium and zinc fails to consider the statistical variability of the data and laboratory analyses as explicitly required by the federal regulations. For example, a multiplier of 1 was used for CTR constituents instead of the required multiplier factors necessary to properly evaluate reasonable potential. The procedures for computing variability are detailed in Chapter 3, pages 52-55, of USEPA's *Technical Support Document For Water Quality-based Toxics Control*. The reasonable potential analyses for selenium and zinc is flawed and must be recalculated. The fact that the SIP illegally ignores this fundamental requirement does not exempt the Regional Board from its obligation to consider statistical variability in compliance with federal regulations.

The proposed Permit contains an Effluent Limitation for acute toxicity that allows mortality that exceeds the Basin Plan water quality objective and does not comply with Federal regulations, at 40 CFR 122.44 (d)(1)(i)

Federal regulations, at 40 CFR 122.44 (d)(1)(i), require that limitations must control all pollutants or pollutant parameters which the Director determines are or may be discharged at a level which will cause, or contribute to an excursion above any State

water quality standard, including State narrative criteria for water quality. The Water Quality Control Plan for the Sacramento/ San Joaquin River Basins (Basin Plan), Water Quality Objectives (Page III-8.00) for Toxicity is a narrative criteria which states that all waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This section of the Basin Plan further states, in part that, compliance with this objective will be determined by analysis of indicator organisms.

The Tentative Permit requires that the Discharger conduct acute toxicity tests and states that compliance with the toxicity objective will be determined by analysis of indicator organisms. However, the Tentative Permit contains a discharge limitation that allows 30% mortality (70% survival) of fish species in any given toxicity test.

Allowing 30% mortality in acute toxicity tests allows that same level of mortality in the receiving stream, in violation of federal regulations and contributes to exceedance of the Basin Plan's narrative water quality objective for toxicity. Accordingly, the proposed Permit must be revised to prohibit acute toxicity in accordance with Federal regulations, at 40 CFR 122.44 (d)(1)(i).

9. The proposed Permit does not contain Effluent Limitations for chronic toxicity and therefore does not comply with Federal regulations, at 40 CFR 122.44 (d)(1)(i)

Federal regulations, at 40 CFR 122.44 (d)(1)(i), require that limitations must control all pollutants or pollutant parameters which the Director determines are or may be discharged at a level which will cause, or contribute to an excursion above any State water quality standard, including state narrative criteria for water quality. The Water Quality Control Plan for the Sacramento/ San Joaquin River Basins (Basin Plan), Water Quality Objectives (Page III-8.00) for Toxicity is a narrative criteria which states that all waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. The Tentative Permit states that: "...to ensure compliance with the Basin Plan's narrative toxicity objective, the discharger is required to conduct whole effluent toxicity testing...". However, sampling does not equate with or ensure compliance. The Tentative Permit requires the Discharger to conduct an investigation of the possible sources of toxicity if a threshold is exceeded. This language is not a limitation and essentially eviscerates the Regional Board's authority, and the authority granted to third parties under the Clean Water Act, to find the Discharger in violation for discharging chronically toxic constituents. An effluent limitation for chronic toxicity must be included in the Order. In addition, the Chronic Toxicity Testing Dilution Series should bracket the actual dilution at the time of discharge, not use default values that are not relevant to the discharge. Accordingly, the proposed Permit must be revised to prohibit chronic toxicity in accordance with Federal regulations, at 40 CFR 122.44 (d)(1)(i).

10. The proposed Permit does not comply with the Board's Antidegradation Policy by failing to require an assessment of groundwater quality and for failing to provide tertiary treatment

The proposed Permit does not require the Discharger to conduct groundwater monitoring. The proposed Permit requires that the Discharger utilizes land disposal via "percolation" ponds from 16 May through 31 October, annually. As is shown in the map, attachment B, the facilities ponds are situated on the banks of the Middle Fork of the Feather River. It is highly likely that the ponds are located on highly permeable river sediments. The wastewater will percolate to groundwater and possibly commingle with river water. The percolation of wastewater to groundwater and surface water poses a threat to degrade water quality.

California's antidegradation policy is composed the State Board's Resolution 68-16 which is included as a part of the Basin Plan. As part of the state policy for water quality control, the antidegradation policy is binding on all of the Regional Boards. Implementation of the state's antidegradation policy is guided by the State Antidegradation Guidance, SWRCB Administrative Procedures Update 90-004, 2 July 1990 ("APU 90-004") and Water Quality Order 86-17.

The Regional Board must apply the antidegradation policy whenever it takes an action that will lower water quality. (State Antidegradation Guidance, pp. 3, 5, 18) Application of the policy does not depend on whether the action will actually impair beneficial uses. (State Antidegradation Guidance, p. 6. Actions that trigger use of the antidegradation policy include issuance, re-issuance, and modification of NPDES and Section 404 permits and waste discharge requirements, waiver of waste discharge requirements, issuance of variances, relocation of discharges, issuance of cleanup and abatement orders, increases in discharges due to industrial production and/or municipal growth and/or other sources, exceptions from otherwise applicable water quality objectives, etc. (State Antidegradation Guidance, pp. 7-10) The State Board's APU 90-004 specifies guidance to the Regional Boards for implementing the state antidegradation policy and guidance. The guidance establishes a two-tiered process for addressing these policies and sets forth two levels of analysis: a simple analysis and a complete analysis. A simple analysis may be employed where a Regional Board determines that: 1) a reduction in water quality will be spatially localized or limited with respect to the waterbody, e.g. confined to the mixing zone; 2) a reduction in water quality is temporally limited; 3) a proposed action will produce minor effects which will not result in a significant reduction of water quality; and 4) a proposed activity has been approved in a General Plan and has been adequately subjected to the environmental and economic analysis required in an EIR. A complete antidegradation analysis is required if discharges would result in: 1) a substantial increase in mass emissions of a constituent; or 2) significant mortality, growth impairment, or reproductive impairment of resident species. Regional Boards are advised to apply stricter scrutiny to non-threshold constituents, i.e., carcinogens and other constituents that are deemed to present a risk of source magnitude at all non-zero concentrations. If a Regional Board cannot find that the above determinations can be reached, a complete analysis is required.

Even a minimal antidegradation analysis would require an examination of: 1) existing applicable water quality standards; 2) ambient conditions in receiving waters compared to standards; 3) incremental changes in constituent loading, both concentration and mass; 4) treatability; 5) best practicable treatment and control (BPTC); 6) comparison of the proposed increased loadings relative to other sources; 7) an assessment of the significance of changes in ambient water quality and 8) whether the waterbody was a ONRW. A minimal antidegradation analysis must also analyze whether: 1) such degradation is consistent with the maximum benefit to the people of the state; 2) the activity is necessary to accommodate important economic or social development in the area; 3) the highest statutory and regulatory requirements and best management practices for pollution control are achieved; and 4) resulting water quality is adequate to protect and maintain existing beneficial uses.

The proposed action here is renewal of an NPDES permit although the applicable provisions being discussed for land disposal are not federally mandated, an antidegradation analysis is required. Any antidegradation analysis must comport with implementation requirements in State Board Water Quality Order 86-17 and State Antidegradation Guidance. The discharge of wastewater to unlined ponds at a minimum threatens groundwater quality, mandating monitoring of groundwater quality to determine if degradation has occurred and to what degree. Groundwater monitoring must be required to determine if the wastewater discharge is degrading groundwater quality and commingling and degrading surface water.

11. The proposed Permit does not contain an antidegradation analysis as required by the State and Regional Board's Antidegradation Policy, the Clean Water Act and Federal Regulations which would show the Discharger is not providing best practicable treatment and control (BPTC) of the discharge

Section 101(a) of the Clean Water Act, the basis for the antidegradation policy, states that the objective of the Act is to "restore and maintain the chemical, biological and physical integrity of the nation's waters." Section 303(d)(4) of the Act carries this further, referring explicitly to the need for states to satisfy the antidegradation regulations at 40 CFR § 131.12 before taking action to lower water quality. These regulations describe the federal antidegradation policy and dictate that states must adopt both a policy at least as stringent as the federal policy as well as implementing procedures. (40 CFR § 131.12(a).)

California's antidegradation policy is composed of both the federal antidegradation policy and the State Board's Resolution 68-16. (State Water Resources Control Board, Water Quality Order 86-17, p. 20 (1986) ("Order 86-17"); Memorandum from William Attwater, SWRCB to Regional Board Executive Officers, "federal Antidegradation Policy," pp. 2, 18 (Oct. 7, 1987) ("State Antidegradation Guidance").) As part of the state policy for water quality control, the antidegradation policy is binding on all of the Regional Boards. (Water Quality Order 86-17, pp. 17-18.) Implementation

of the state's antidegradation policy is guided by the State Antidegradation Guidance, SWRCB Administrative Procedures Update 90-004, 2 July 1990 ("APU 90-004") and USEPA Region IX, "Guidance on Implementing the Antidegradation Provisions of 40 CFR 131.12" (3 June 1987) ("Region IX Guidance"), as well as Water Quality Order 86-17.

The Regional Board must apply the antidegradation policy whenever it takes an action that will lower water quality. (State Antidegradation Guidance, pp. 3, 5, 18, and Region IX Guidance, p. 1.) Application of the policy does not depend on whether the action will actually impair beneficial uses. (State Antidegradation Guidance, p. 6. Actions that trigger use of the antidegradation policy include issuance, re-issuance, and modification of NPDES and Section 404 permits and waste discharge requirements, waiver of waste discharge requirements, issuance of variances, relocation of discharges, issuance of cleanup and abatement orders, increases in discharges due to industrial production and/or municipal growth and/or other sources, exceptions from otherwise applicable water quality objectives, etc. (State Antidegradation Guidance, pp. 7-10, Region IX Guidance, pp. 2-3.) Both the state and federal policies apply to point and nonpoint source pollution. (State Antidegradation Guidance p. 6, Region IX Guidance, p. 4.)

There are two specific areas where the proposed facility does not provide BPTC: the facility discharges to unlined percolation ponds likely degrading groundwater quality; the facility uses an outdated pond system while the regulation of wastewater treatment plants throughout the Central Valley Region show that since most wastewater systems are required to treat to a tertiary level, that a tertiary level of treatment is BPTC.

12. The MRP fails to monitor for odors during the most critical time of the year

The Monitoring and Reporting Program, treatment ponds, contains a footnote that *excessive odors or other nuisances* are only to be observed from April through June. The critical period for odors would be the hot summer months of July, August and September.

Thank you for considering these comments. If you have questions or require clarification, please don't hesitate to contact us.

Sincerely,



Bill Jennings, Executive Director
California Sportfishing Protection Alliance