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For Petitioner California Sportfishing Protection Alliance

BEFORE THE STATE WATER RESOURCES CONTROL BOARD

In the Matter of Waste Discharge Requirements For Clear Creek Community Services District, Clear Creek Community Services Water Treatment Plant, Shasta County, California Regional Water Quality Control Board – Central Valley Region Order No. R5-2006-0116; NPDES No. CA0083828	**PETITION FOR REVIEW**

Pursuant to Section 13320 of California Water Code and Section 2050 of Title 23 of the California Code of Regulations (CCR), California Sportfishing Protection Alliance ("CSPA" or "petitioner") petitions the State Water Resources Control Board (State Board) to review and vacate the final decision of the California Regional Water Quality Control Board for the Central Valley Region ("Regional Board") in adopting Waste Discharge Requirements (NPDES No. CA0083828) Clear Creek Community Services District Water Treatment Plant on 27 October 2006. *See* Order No. R5-2006-0116. The issues raised in this petition were raised in timely written comments and direct testimony.

1. NAME AND ADDRESS OF THE PETITIONERS:

California Sportfishing Protection Alliance
3536 Rainier Avenue
Stockton, California 95204
Attention: Bill Jennings, Executive Director

2. THE SPECIFIC ACTION OR INACTION OF THE REGIONAL BOARD WHICH THE STATE BOARD IS REQUESTED TO REVIEW AND A COPY OF ANY ORDER OR RESOLUTION OF THE REGIONAL BOARD WHICH IS REFERRED TO IN THE PETITION:

Petitioner seeks review of Order No. R5-2006-0116, Waste Discharge Requirements (NPDES No. CA0083828) for Clear Creek Community Services District Water Treatment Plant. Copies of the orders adopted by the Regional Board at its 27 October 2006 Board meeting are attached hereto as Attachments A.

3. THE DATE ON WHICH THE REGIONAL BOARD ACTED OR REFUSED TO ACT OR ON WHICH THE REGIONAL BOARD WAS REQUESTED TO ACT:

27 October 2006

4. A FULL AND COMPLETE STATEMENT OF THE REASONS THE ACTION OR FAILURE TO ACT WAS INAPPROPRIATE OR IMPROPER:

CSPA submitted a detailed comment letter on 19 September 2006. This letter, the following comments and oral remarks presented during the 27 October 2006 public hearing set forth in detail the reasons and points and authorities why CSPA believes the Order fails to comport with statutory and regulatory requirements. The specific reasons the adopted Orders are improper are:

A. The Order contains provisions for a New Discharge without any Antidegradation analysis or any analysis or characterization of the water quality impacts.

The Regional Board has included an allowance for a <u>new</u> wastewater discharge to surface waters. The fact that this constitutes a "new" discharge is confirmed by Monitoring and Reporting Program VIII (B) which states that: Low threat discharge monitoring locations shall be modified as <u>new</u> low threat discharges from the facility are identified." The discharges have not even been identified, and cannot possibly be characterized. The wastewater effluent has not been characterized, including for CTR constituents, a violation of Federal Regulations 40 CFR 122.21 and SIP Section 1.2. In accordance with 40 CFR 122.21 (e) and (h) and 124.3 (a)(2) the Regional Board shall not adopt the Order without first a complete application, in this case for industrial or commercial facilities, for which the Order application requirements are extensive. Since

there is no data characterizing the wastewater discharge, and no documentation of the wastewater quality in the Order, it is impossible to determine if the proposed effluent limitations are protective of receiving water quality and the beneficial uses of the receiving stream(s). It would appear that the "low threat" discharges were not addressed in the Report of Waste Discharge, but an attempt by the Regional Board to give a gift discharge allowance to a Discharger. The Order does not address CEQA compliance for the new wastewater discharge, and it is doubtful that a CEQA document has been prepared. The Order does not specify the point of discharge as required by 40 CFR 122.45 (a) for "low threat" discharges, does not identify the receiving stream(s) and does not include receiving water monitoring. Receiving water monitoring is critical to determine if the Order violates Receiving Water Limitations based on Basin Plan water Quality Objectives. Adequate monitoring is required to determine compliance in accordance with Federal Regulations 40 CFR 122.44 (i). There is no discussion of the new discharge in the Order Findings or Fact Sheet a violation of Federal Regulations 40 CFR 124.8. The Order, (6) Other Special Provisions (b)(iii)(3)(c) requires in part that: "When reasonable assurance cannot be provided that a discharge will comply with the prohibitions and limitations of this Order…" the Discharger is simply required to conduct sampling and the non-compliance is apparently allowed, which clearly shows the discharge is not a "low threat" and is not in accordance with 40 CFR 122.41 (a) *Duty to Comply,* 122.4 (a) and 122.4 (2)(i).

Municipal water system discharges have a reasonable potential to exceed water quality standards. Municipal water systems routinely exceed the total trihalomethane drinking water MCL of 80 μg/l. The CTR contains significantly more stringent standards for chlorodibromomethane (0.401μg/l) and dichlorobromomethane (0.56 μg/l), both trihalomethanes. It is reasonable to assume, especially since the municipal water supply is chlorinated, that the "low threat" discharges from the water distribution system would exceed water quality standards for chlorodibromomethane and dichlorobromomethane. The effluent from the water treatment system filter backwash contained copper at concentrations that exceed water quality standards. It is reasonable to assume, therefore that discharges from the water distribution system would also contain copper concentrations above CTR water quality standards. The "low threat" discharges pose a threat to exceed water quality standards and must be properly regulated and characterized, not just lumped into a Order for a completely separate wastewater discharge, stating they are "low threat" without any supporting documentation.

The Order contains Effluent Limitations, Section IV, B, for "Low Threat Discharge Limitations", Special Provisions, Section VI (6)(b) and Monitoring Requirements, VIII (B) related to allowing a new, previously unregulated discharge of wastewater to surface waters.

There is no antidegradation analysis with regard to the new "Low Threat" discharge. The antidegradation analysis in the Order is not simply deficient, it is literally nonexistent. The brief discussion of antidegradation requirements, in the Findings and Fact Sheet, consist only of skeletal, unsupported, undocumented conclusory statements totally lacking in factual analysis. The failure to undertake a rigorous antidegradation

analysis for a new discharge of pollutants into a waterbody is appalling. Regional Board staff are either unaware of state and federal policies regarding antidegradation analyses or they have been directed to ignore them.

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 Orders 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/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.)

The federal antidegradation regulations delineate three tiers of protection for waterbodies. Tier 1, described in 40 CFR § 131.12(a)(1), is the floor for protection of all waters of the United States. (48 Fed. Reg. 51400, 51403 (8 Nov. 1983); Region IX Guidance, pp. 1-2; APU 90-004, pp. 11-12.) It states that "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." Uses are "existing" if they were actually attained in the water body on or

after November 28, 1975, or if the water quality is suitable to allow the use to occur, regardless of whether the use was actually designated. (40 CFR § 131.3(e).) Tier 1 protections apply even to those waters already impacted by pollution and identified as impaired. In other words, already impaired waters cannot be further impaired.

Tier 2 waters are provided additional protections against unnecessary degradation in places where the levels of water quality are better than necessary to support existing uses. Tier 2 protections strictly prohibit degradation unless the state finds that a degrading activity is: 1) necessary to accommodate important economic or social development in the area, 2) water quality is adequate to protect and maintain existing beneficial uses, and 3) the highest statutory and regulatory requirements and best management practices for pollution control are achieved. (40 CFR § 131.12(a)(2).) Cost savings to a discharger alone, absent a demonstration by the project proponent as to how these savings are "necessary to accommodate important economic or social development in the area," are not adequate justification for allowing reductions in water quality. (Water Quality Order 86-17, p. 22; State Antidegradation Guidance, p. 13.) If the waterbody passes this test and the degradation is allowed, degradation must not impair existing uses of the waterbody. (48 Fed. Reg. at 51403). Virtually all waterbodies in California may be Tier 2 waters since the state, like most states, applies the antidegradation policy on a parameter-by-parameter basis, rather than on a waterbody basis. (APU 90-004, p. 4). Consequently, a request to discharge a particular chemical to a river, whose level of that chemical was better than the state standards, would trigger a Tier 2 antidegradation review even if the river was already impaired by other chemicals.

Tier 3 of the federal antidegradation policy states "[w]here high quality waters constitute an outstanding national resource, such as waters of national and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water shall be maintained and protected. (40 CFR § 131.12(a)(3).) These Outstanding National Resource Waters (ONRW) are designated either because of their high quality or because they are important for another reason. (48 Fed. Reg. At 51403; State Antidegradation Guidance, p. 15). No degradation of water quality is allowed in these waters other than short-term, temporary changes. (Id.) Accordingly, no new or increased discharges are allowed in either ONRW or tributaries to ONRW that would result in lower water quality in the ONRW. (EPA Handbook, p. 4-10; State Antidegradation Guidance, p. 15.) Existing antidegradation policy already dictates that if a waterbody "should be" an ONRW, or "if it can be argued that the waterbody in question deserves the same treatment {as a formally designated ONRW]," then it must be treated as such, regardless of formal designation. (State Antidegradation Guidance, pp. 15-16; APU 90-004, p. 4.) Thus the Regional Board is required in each antidegradation analysis to consider whether the waterbody at issue should be treated as an ONRW. It should be reiterated that waters cannot be excluded from consideration as an ONRW simply because they are already "impaired" by some constituents. By definition, waters may be "outstanding" not only because of pristine quality, but also because of recreational significance, ecological significance or other reasons. (40 CFR §131.12(a)(3).) Waters need not be "high quality" for every parameter to be an ONRW. (APU 90-004, p. 4) For

example, Lake Tahoe is on the 303(d) list due to sediments/siltation and nutrients, and Mono Lake is listed for salinity/TDC/chlorides but both are listed as ONRW.

The State Board's APU 90-004 specifies guidance to the Regional Boards for implementing the state and federal antidegradation policies 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. A BPTC technology analysis must be done on an individual constituent basis; for example while tertiary treatment may provide BPTC for pathogens, dissolved metals may simply pass through.

Any antidegradation analysis must comport with implementation requirements in State Board Water Quality Order 86-17, State Antidegradation Guidance, APU 90-004 and Region IX Guidance. There is simply no discussion of the new "low threat" discharge in the antidegradation discussion in the Order.

The antidegradation review process is especially important in the context of waters protected by Tier 2. See EPA, Office of Water Quality Regulations and Standards, Water Quality Standards Handbook, 2nd ed. Chapter 4 (2nd ed. Aug. 1994). Whenever a person proposes an activity that may degrade a water protected by Tier 2, the antidegradation regulation requires a state to: (1) determine whether the degradation is

"necessary to accommodate important economic or social development in the area in which the waters are located"; (2) consider less-degrading alternatives; (3) ensure that the best available pollution control measures are used to limit degradation; and (4) guarantee that, if water quality is lowered, existing uses will be fully protected. 40 CFR § 131.12(a)(2); EPA, Office of Water Quality Regulations and Standards, Water Quality Standards Handbook, 2nd ed. 4-1, 4-7 (2nd ed. Aug. 1994). These activity-specific determinations necessarily require that each activity be considered individually.

For example, the APU 90-004 states:

> "Factors that should be considered when determining whether the discharge is necessary to accommodate social or economic development and is consistent with maximum public benefit include: a) past, present, and probably beneficial uses of the water, b) economic and social costs, tangible and intangible, of the proposed discharge compared to benefits. The economic impacts to be considered are those incurred in order to maintain existing water quality. The financial impact analysis should focus on the ability of the facility to pay for the necessary treatment. The ability to pay depends on the facility's source of funds. In addition to demonstrating a financial impact on the publicly – or privately – owned facility, the analysis must show a significant adverse impact on the community. The long-term and short-term socioeconomic impacts of maintaining existing water quality must be considered. Examples of social and economic parameters that could be affected are employment, housing, community services, income, tax revenues and land value. To accurately assess the impact of the proposed project, the projected baseline socioeconomic profile of the affected community without the project should be compared to the projected profile with the project…EPA's Water Quality Standards Handbook (Chapter 5) provides additional guidance in assessing financial and socioeconomic impacts"

There is nothing resembling an economic or socioeconomic analysis in the Order. There are viable alternatives that have never been analyzed. The Discharger could discharge "low threat" waters to the sanitary sewer. As a rule-of-thumb, USEPA recommends that the cost of compliance should not be considered excessive until it consumes more than 2% of disposable household income in the region. This threshold is meant to suggest more of a floor than a ceiling when evaluating economic impact. In the Water Quality Standards Handbook, USEPA interprets the phrase "necessary to accommodate important economic or social development" with the phrase "substantial and widespread economic and social impact."

There is nothing in the Order resembling an analysis that ensures that existing beneficial uses are protected. Nor does the Order analyze the incremental and cumulative impact of increased loading of non-impairing pollutants on beneficial uses. In fact, there is no information or discussion on the composition and health of the identified beneficial

uses. Any reasonably adequate antidegradation analysis must discuss the affected beneficial uses (i.e., numbers and health of the aquatic ecosystem; extent, composition and viability of agricultural production; people depending upon these waters for water supply; extent of recreational activity; etc.) and the probable effect the discharge will have on these uses.

In Order WQ 90-05, the Board directed the San Francisco Regional Board on the appropriate method for establishing mass-based limits that comply with state and federal antidegradation policies. That 1990 order stated "[I]n order to comply with the federal antidegradation policy, the mass loading limits should also be revised, based on mean loading, concurrently with the adoption of revised effluent limits. The [mass] limits should be calculated by multiplying the [previous year's] annual mean effluent concentration by the [four previous year's] annual average flow. (Order WQ 90-05, p. 78).

B. The Discharger is only required to sample for chlorine twice monthly (grab samples), when continuous monitoring is BPTC.

The Monitoring and Reporting Program requires the Discharger sample the wastewater discharge twice monthly for chlorine. Chlorine is a toxic substance. Chlorine is utilized in the water treatment plant as a disinfectant and may be used for disinfecting the filters during backwash. Chlorine can be discharged at toxic concentrations at any time there are system failures, which occur routinely throughout the wastewater treatment industry. The Discharger violated the chlorine effluent limitation on 10 November 2003. There is reasonable potential for the discharge to exceed the Basin Plan narrative toxicity water quality objective. The Order contains an effluent limitation for chlorine. Federal Regulation 40 CFR 122.44 (i)(1) requires monitoring requirements be sufficient to assure compliance with Order limitations. Most wastewater treatment systems currently employ continuous chlorine monitoring systems. The cost of continuous chlorine monitoring systems is not prohibitive. Continuous chlorine monitoring is BPTC. The Regional and State Board's Antidegradation Policy and Federal Regulations require BPTC be provided.

C. The Order contains a flawed Reasonable Potential Analysis for priority pollutants and an inadequate wastestream characterization.

Fact Sheet Table F-1 shows that the Regional Board apparently required the Clear Creek Community Services District conduct two sampling rounds for priority pollutants to characterize the discharge, although many of the sampled pollutants are shown as having only one data point. The monitoring and Reporting Program shows that the Discharger will only be required to sample for priority pollutants once throughout the five-year life of the Order. If one uses standard statistical methods, such as the student-T test, a minimum of 13 data points is considered the minimum number of data points to conduct an accurate analysis. This would mean that the CTR final compliance date of May 2010 would be passed by decades before the Regional Board would conduct a proper reasonable potential analysis. The Regional Board, by requiring what it states is

an unacceptable number of priority pollutant sampling rounds, is deliberately avoiding the regulation of priority pollutants. We have no confidence that one or two sampling rounds for priority pollutants was sufficient to determine what priority pollutants may be present in the discharge in problematic concentrations. The water quality to the treatment system could vary seasonally, the Regional Board's minimally prescribed sampling would not have caught these changes in the wastewater character. The Regional Board did not present any information regarding why the level of sampling required has been so minimal. The purpose of filters on the water treatment system is to remove constituents that are not allowable in the domestic water supply. The filter backwash water contains all of these constituents in concentrated form. Aquatic life criteria are typically much lower than drinking water standards. Aquatic life is a designated beneficial use of the receiving stream. It is reasonable that the concentrated filter backwash water will contain significant priority pollutants exceeding water quality standards. The discharge was not sampled for bacteria, which could be concentrated in the filter backwash water at levels exceeding the Receiving Water Limitations and based on the Basin Plan water quality objective for bacteria. Polymers used in filtration systems, such as this can in themselves be toxic, no mention is made of the toxic affects of polymers. The Regional Board should not reissue the Order until the wastestream has been adequately characterized and they can provide an adequate reasonable potential analysis to protect water quality and the beneficial uses of the receiving stream in accordance with Federal Regulation, 40 CFR 122.4 (a), (d) and (g) which require that no Order may be issued when the conditions of the Order 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.

D. The Order Fact Sheet Finds Reasonable Potential for Dichlorobromomethane to exceed CTR water quality standards but fails to include an effluent limitation in violation of Federal Regulations and the SIP.

The maximum observed effluent concentration for dichlorobromomethane was 3.0 μg/l which exceeds the CRT water quality standard of 0.56 μg/l. In accordance with Federal Regulations, 40 CFR 122.44, the Regional Board is required to establish an effluent limitation if a pollutant is measures 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. The measured concentrations of dichlorobromomethane clearly exceed the CTR water quality standard and in accordance with Federal Regulations and the SIP, effluent limitations are required. Federal Regulation, 40 CFR 122.4 (a), (d) and (g) require that no Order may be issued when the conditions of the Order 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.

E. The Order Fact Sheet Finds Reasonable Potential for aluminum to exceed recommended ambient criteria protective of the narrative toxicity water quality objective but fails to include an effluent limitation in violation of Federal Regulations.

The maximum observed effluent concentration for aluminum was 93.2 μg/l, which exceeds the ambient water quality criteria of 87μg/l. In accordance with Federal Regulations, 40 CFR 122.44, the Regional Board is required to establish an effluent limitation if a pollutant is measures in the effluent which presents a reasonable potential to exceed a water quality standard of objective, in this case the narrative toxicity objective. The measured concentrations of aluminum clearly exceed the ambient water quality criteria and in accordance with Federal Regulations, effluent limitations are required. Federal Regulation 40 CFR 122.44 states that an effluent limitation is required to be included in a Order if a pollutant presents a reasonable potential to exceed a water quality standard or objective. Federal Regulation, 40 CFR 122.4 (a), (d) and (g) require that no Order may be issued when the conditions of the Order 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. An effluent limitation must be added to the Order or the Order should not be reissued in accordance with 40 CFR 122.4.

F. The Order contains a flawed Reasonable Potential Analysis for bis(2-ethylhexyl)phthalate.

Bis(2-ethylhexyl)phthalate exceeds water quality standards in the receiving stream at 7.0 μg/l, above the CTR Water Quality Standard on 1.8 μg/l, but has not been detected in the wastewater effluent. The Order Fact Sheet states that the receiving water sampling data for bis(2-ethylhexyl)phthalate is subject to error and is being discarded without any supporting documentation from the laboratory quality assurance/quality control (QA/QC) documents. The Regional Board total disregards scientific methods, specifically sampling and laboratory QA/QC methodologies, in throwing out data points that would lead to a reasonable potential for a pollutant to exceed water quality standards when the burden should properly be placed on wastewater Dischargers to conduct proper sampling and analysis.

G. The Order Fact Sheet Finds Reasonable Potential for iron to exceed the drinking water MCL protective of the municipal beneficial use of the receiving stream and the chemical constituents water quality objective but fails to include an effluent limitation in violation of Federal Regulations.

The Order determined there was a reasonable potential for iron to exceed a secondary drinking water Maximum Contaminant Level (MCL) which is incorporated into the Basin Plan as a Chemical Constituents water quality objective. The Order properly projected the maximum effluent concentration (MEC) in accordance with Federal regulations, 40 CFR § 122.44(d)(1)(ii), which 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 Orderting 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, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water." Emphasis added. 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* and were properly followed resulting in a reasonable potential for exceeding the Chemical Constituents water quality objective standard for iron. The projected concentrations of iron clearly exceed the chemical constituents water quality objective and the MCL and in accordance with Federal Regulations, effluent limitations are required. Federal Regulation 40 CFR 122.44 states that an effluent limitation is required to be included in a Order if a pollutant presents a reasonable potential to exceed a water quality standard or objective. Federal Regulation, 40 CFR 122.4 (a), (d) and (g) require that no Order may be issued when the conditions of the Order 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. An effluent limitation for iron must be added to the Order or the Order should not be reissued in accordance with 40 CFR 122.4.

H. The Order Fact Sheet Finds Reasonable Potential for manganese to exceed the drinking water MCL protective of the municipal beneficial use of the receiving stream and the chemical constituents water quality objective exceed recommended ambient criteria protective of the narrative toxicity water quality objective but fails to include an effluent limitation in violation of Federal Regulations.

The maximum observed effluent concentration for manganese was 93.8 μg/l, which exceeds the Secondary Maximum Contaminant Level (MCL) of 50μg/l. In accordance with Federal Regulations, 40 CFR 122.44, the Regional Board is required to establish an effluent limitation if a pollutant is measures in the effluent which presents a reasonable potential to exceed a water quality standard of objective, in this case the MCL which is incorporated into the Basin Plan as a Chemical Constituents water quality objective. The measured concentrations of manganese clearly exceed the MCL and in accordance with Federal Regulations, effluent limitations are required. Federal Regulation 40 CFR 122.44 states that an effluent limitation shall be required to be included in a Order if a pollutant presents a reasonable potential to exceed a water quality standard or objective. Federal Regulation, 40 CFR 122.4 (a), (d) and (g) require that no

Order may be issued when the conditions of the Order 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. An effluent limitation must be added to the Order for manganese or the Order should not be reissued in accordance with 40 CFR 122.4.

I. The Order contains a flawed Reasonable Potential Analysis for electrical conductivity (EC).

Federal Regulations, 40 CFR 122.44 (d)(i), requires that; "Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." The Water Quality Control Plan (Basin Plan) for the Central Valley Region, Water Quality Objectives, page III-3.00, contains a Chemical Constituents Objective that includes Title 22 Drinking Water Maximum Contaminant Levels (MCLs) by reference. The Title 22 MCLs for EC are 900 μmhos/cm (recommended level), 1,600 μmhos/cm (upper level) and 2,200 μmhos/cm (short term maximum).

The Basin Plan states, on Page III-3.00 Chemical Constituents, that "Waters shall not contain constituents in concentrations that adversely affect beneficial uses." The Basin Plan's "Policy for Application of Water Quality Objectives" provides that in implementing narrative water quality objectives, the Regional Board will consider numerical criteria and guidelines developed by other agencies and organizations. This application of the Basin Plan is consistent with Federal Regulations, 40CFR 122.44(d).

For EC, Ayers R.S. and D.W. Westcott, Water Quality for Agriculture, Food and Arriculture Organization of the United Nations – Irrigation and Drainage Paper No. 29, Rev. 1, Rome (1985), levels above 700 µmhos/cm will reduce crop yield for sensitive plants. The University of California, Davis Campus, Agricultural Extension Service, published a paper, dated 7 January 1974, stating that there will not be problems to crops associated with salt if the EC remains below 750 µmhos/cm.

The wastewater discharge EC level is projected to be 1253μmhos/cm (From Fact Sheet Table F-1). Clearly the discharge exceeds the MCLs for EC presenting a reasonable potential to exceed the water quality objective. The proposed EC limitation clearly exceeds the agricultural water quality goal and the MCL for EC. The Order properly projected the maximum effluent concentration (MEC) in accordance with Federal regulations, 40 CFR § 122.44(d)(1)(ii), which 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 Orderting 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, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water." Emphasis added. 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 and were properly followed resulting in a reasonable potential for exceeding the agricultural water quality goal and the MCL for EC. The proposed Order fails to establish an effluent limitation for EC that are protective of the Chemical Constituents water quality objective. The wastewater discharge increases concentrations of EC to unacceptable concentrations adversely affecting the agricultural beneficial use. The available literature regarding safe levels of EC for irrigated agriculture mandate that an Effluent Limitation for EC is necessary to protect the beneficial use of the receiving stream in accordance with the Basin Plan and Federal Regulations. Failure to establish effluent limitations for EC that are protective of the Chemical Constituents water quality objective blatantly violates the law. Federal Regulation, 40 CFR 122.44, mandates an effluent limitation be established if a discharge exceeds a water quality objective which is clearly the case here with regard to EC.

J. The Order does not contain protective limitations for Acute Toxicity.

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 Order 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 Order contains a discharge limitation that allows 30% mortality (70% survival) of fish species in any given toxicity test. For an ephemeral or low flow stream, 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 Order should be revised to prohibit acute toxicity.

K. The Order does not contain protective limitations for chronic toxicity.

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 Order 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 Order 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.

L. The Groundwater Limitation is not protective against degradation of water quality and violates the State and Regional Board's Antidegradation Policy and Federal Regulations

The proposed Groundwater Limitation does not prohibit degradation of groundwater quality when compared with background water quality. There is no discussion of best practicable treatment and control (BPTC) of the discharge of waste to groundwater and an allowance for groundwater degradation.

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.

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).)

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 Orders 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/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.)

The Discharger must be required to provide BPTC of the discharge and the Order must be revised to prohibit the degradation of groundwater quality or contain a complete antidegradation analysis.

M. The Discharger should provide BPTC in accordance with the Regional and State Board's Antidegradation Policy and Federal Regulations and eliminate the wastewater discharge.

The discharge of waste can be eliminated from surface waters, which would represent best practicable treatment and control (BPTC) of the discharge. The Clear Creek Community Services District owns and operates a potable water treatment plant. Filter backwash water is discharged to surface water. Most domestic water treatment plants either return filter backwash water to the plant headworks or discharge to the sanitary sewer rather than discharge to surface waters. There is no technical reason why the Discharger cannot provide BPTC and recycle 100% of the wastewater to the treatment plant headworks or discharge to the sanitary sewer. Section 303(d)(4) of the Clean Water Act refers 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).) The Regional and State Board's Antidegradation Policy and Federal Regulations require BPTC be provided.

5. THE MANNER IN WHICH THE PETITIONERS ARE AGGRIEVED.

CSPA is a non-profit, environmental organization that has a direct interest in reducing pollution to the waters of the Central Valley. CSPA's members benefit directly from the waters in the form of recreational hiking, photography, fishing, swimming, hunting, bird watching, boating, consumption of drinking water and scientific investigation. Additionally, these waters are an important resource for recreational and commercial fisheries.

Central Valley waterways also provide significant wildlife values important to the mission and purpose of the Petitioners. This wildlife value includes critical nesting and feeding grounds for resident water birds, essential habitat for endangered species and

other plants and animals, nursery areas for fish and shellfish and their aquatic food organisms, and numerous city and county parks and open space areas.

CSPA's members reside in communities whose economic prosperity depends, in part, upon the quality of water. CSPA has actively promoted the protection of fisheries and water quality 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 declining aquatic resources.

CSPA member's health, interests and pocketbooks are directly harmed by the failure of the Regional Board to develop an effective and legally defensible program addressing discharges to waters of the state and nation.

6. THE SPECIFIC ACTION BY THE STATE OR REGIONAL BOARD WHICH PETITIONER REQUESTS.

Petitioners seek an Order by the State Board to:

Vacate Order No. R5-2006-0116 (NPDES No. CA0083828) and remand to the Regional Board with instructions prepare and circulate a new tentative order that comports with regulatory requirements.

Petitioners, however, request that the State Board hold in abeyance further action on this Petition for up to two years or further notice by Petitioners, whichever comes first. Petitioners, along with other environmental groups, anticipate filing one or more additional petitions for review challenging decisions by the Regional Board concerning the issues raised in this Petition in the coming months. For economy of the State Board and all parties, Petitioners will request the State Board to consolidate these petitions and/or resolve the common issues presented by these petitions by action on a subset of the petitions. Accordingly, Petitioners urge that holding this Petition in abeyance for now is a sensible approach.

7. A STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF LEGAL ISSUES RAISED IN THE PETITION.

CSPA's arguments and points of authority are adequately detailed in the above comments, our 19 September 2006 comment letter that was accepted into the record and our oral testimony presented to the Regional Board on 27 October 2006. Should the State Board have additional questions regarding the issues raised in this petition, CSPA will provide additional briefing on any such questions.

The petitioners believe that an evidentiary hearing before the State Board will not be necessary to resolve the issues raised in this petition. However, CSPA welcomes the opportunity to present oral argument and respond to any questions the State Board may have regarding this petition.

8. A STATEMENT THAT THE PETITION HAS BEEN SENT TO THE APPROPRIATE REGIONAL BOARD AND TO THE DISCHARGERS, IF NOT THE PETITIONER.

A true and correct copy of this petition, without attachment, was sent electronically and by First Class Mail to Ms. Pamela Creedon, Executive Officer, Regional Water Quality Control Board, Central Valley Region, 11020 Sun Center Drive #200, Rancho Cordova, CA 95670-6114.

A true and correct copy of this petition, without attachment, was sent to the Discharger in care of Clear Creek Community Services District, Clear Creek Community Services District Water Treatment Plant, Page Bar Road, Igo, California 96047 and Mr. Ron Carlin, Filter Plant Supervisor, Clear Creek CSD, 5880 Oak Street, Anderson, CA 96007.

9. A STATEMENT THAT THE ISSUES RAISED IN THE PETITION WERE PRESENTED TO THE REGIONAL BOARD BEFORE THE REGIONAL BOARD ACTED, OR AN EXPLANATION OF WHY THE PETITIONER COULD NOT RAISE THOSE OBJECTIONS BEFORE THE REGIONAL BOARD.

CSPA presented the issues addressed in this petition to the Regional Board in live oral testimony at the 27 October 2006 hearing on the Order or in comments submitted to the Regional Board on 19 September 2006 that were accepted into the record.

If you have any questions regarding this petition, please contact Bill Jennings at (209) 464-5067 or Mike Jackson at 530-283-1007.

Dated: 24 November 2006

Respectfully submitted,

Bill Jennings, Executive Director
California Sportfishing Protection Alliance

Attachments:

A. Order No. R5-2006-0116