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VIA: Electronic Submission
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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)
City of Fresno and Copper River Ranch, LLC and) **PETITION FOR REVIEW**
Consolidated Land Company and Consolidated)
Industries, Inc., and Fresno Metropolitan Flood)
Control District, North Fresno Wastewater)
Reclamation Facility, California Regional Water)
Quality Control Board – Central Valley Region Order)
No. R5-2006-????; NPDES No. CA0085189)

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. CA0085189) for North Fresno Wastewater Reclamation Facility, Fresno County, on 21 September 2006. *See* Order No. R5-2006-

???. 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-???, Waste Discharge Requirements (NPDES No. CA0085189) for North Fresno Wastewater Reclamation Facility, Fresno County. CSPA has not received copies of the adopted order and, as of 21 October 2006, the adopted order had not been posted on the Regional Board's Adopted Orders web page. Consequently, CSPA is unable to provide the specific order number or a copy of the adopted order.

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

21 September 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 5 September 2006. This letter, which is attached and incorporated into this petition, and the following comments set forth in detail the reasons and points and authorities why CSPA believes the Order fails to comport with statutory and regulatory requirements. CSPA also presented detailed comments during the 21 September 2006 hearing. Although requested, CSPA only received copies of the public hearing tapes on 19 October 2006 and has not had adequate time to review them but believes these verbal comments further support this petition.

A copy of the final Order has not been provided, as of the submission of this petition. Numerous changes were inserted as late revisions immediately prior to and during the hearing. Our petition reflects our understanding of a very confusing Permit. Consequently, CSPA reserves the right to modify this Petition after we have been afforded an opportunity to review the final Order.

The specific reasons the adopted Order is improper are:

A. The Order fails to contain Effluent Limitations for the wastewater discharge from the “DE Basin” that are protective of water quality in violation of state law and Federal regulations.

Wastewater from the wastewater treatment plant is discharged to a “DE basin” prior to entering waters of the state and United States. Wastewater is allowed to commingle with stormwater in the DE basin. The commingled water is then discharged to surface waters, waters of the state and United States. The Order does not contain effluent limitations for the discharge of the commingled wastewater from the DE basin. Federal Regulation, 40 CFR 122.2 defines *treatment works* as a POTW used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage. Federal Regulation, 40 CFR 122.2 also defines *waters of the United States* as specifically excluding waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA from waters of the United States designation. Section 1.4 of the SIP, page 13, requires that Effluent Limitations shall apply to the total effluent of a waste discharge at the end-of-pipe, with limited exclusions where such limits are impracticable or infeasible. There are no effluent limitations in the Order end-of-pipe (were the discharge enters waters of the United States). Instead, the Order establishes effluent limitations as the wastewater enters the DE basin. Retention, storage or percolation basins have a potential to grow algae, cause shifts in pH, modify temperature and reduce dissolved oxygen levels. These changes in the character of the wastewater can degrade water quality and threaten beneficial uses of the receiving stream.

A Regional Board staff comment letter indicates that treatment and waste retention do occur in the DE Basin. Staff’s letter state in part, “...a man-made retention basin designed in part, to prevent pollutants from reaching the San Joaquin River.” However, as stated above, Federal Regulation, 40 CFR 122.2 defines *treatment works* as a POTW used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage. The DE basin is a part of the POTW, it is not a receiving water, not a water of the United States. Effluent limitations must be met end-of-pipe, after the POTW, after the DE basin.

The Discharger intentionally blends wastewater and stormwater in the DE basin, a part of the POTW. Federal Regulation 40 CFR 122.45 (f)(1)(iii) requires mass limitations in NPDES Orders to *ensure that dilution will not be used as a substitute for treatment*. In accordance with the SIP and Federal Regulations, the wastewater must be compliant with effluent limitations as it enters waters of the United States, the receiving stream not the DE basin.

The Discharger has the ability to easily stop commingling wastewater and stormwater, by building a levee in the DE basin or diverting either wastestream away from the BE basin. 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 Orders 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.” 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. A Discharger cannot be allowed to design and construct a facility and flood it with stormwater to avoid regulation at the point of discharge to waters of the state and the United States. The Order, as adopted does not contain limitations that are sufficient to assure compliance with California Water Code, section 13377 and Federal Regulation, 40 CFR 122.4 (a), (d) and (g) as wastewater enters the receiving stream. Effluent limitations for wastewater discharges from the DE Basin to waters of the United States must be included in the Order.

While we believe that the above constitutes the legal and technically appropriate means of regulating this facility, we do recognize that there is a proper regulatory alternative. Wastewater treatment plants are applicable industries requiring regulation under the federal stormwater program. Most WWTPs choose to divert their stormwater flows at the facility to the domestic wastestream. The commingled wastes are discharged as simply “wastewater”. There is no exemption for the commingled wastewater and stormwater. While the volume of stormwater at North Fresno is significantly greater, the principal is the same, the commingled waters are designated as wastewater and must be compliant at the point of discharge to waters of the state and the United States. It is an appropriate alternative to establish fully protective Effluent Limitations at the point of discharge to surface waters for the commingled wastewater. In either case, the Order must be remanded back to the Regional Board to be modified to require compliance at the point of discharge to surface waters.

B. The lack of data for ammonia, nitrate and total nitrogen does not eliminate reasonable potential.

Regional Board staff removed limitations for ammonia, nitrate and total nitrogen from the original tentative Order because “of a lack of data” for these constituents. The 23 August 2006 Response to Comments states, “[i]f it is determined, after sufficient data collection, that the discharge has a reasonable potential to cause or contribute to an excursion of applicable water quality objectives, the Order will be reopened and effluent limitations added for the appropriate constituent(s).”

Frankly, it is absurd to suggest that samples must be collected to determine if there is ammonia in domestic wastewater. Such a statement suggests a fundamental lack of understanding of the basic principles of wastewater engineering. Domestic wastewater contains ammonia at levels approximately 60 mg/L, depending upon the strength of the wastewater. This in itself presents a reasonable potential that ammonia can be present at concentrations toxic to aquatic life. The Order does not state whether or not the plant

will be operated in a nitrification/denitrification mode. If the plant is not designed to nitrify and denitrify, there is no question that reasonable potential exists. If it is designed to nitrify/denitrify, limitations will ensure that the plant is properly operated in a nitrification/denitrification mode. However, nitrification/denitrification is not a stable process. Even the best run wastewater treatment plants occasionally fall out of nitrification/denitrification mode. Therefore, because the process is unstable, ammonia can still pass through at toxic levels during periods of upset even if the wastewater treatment plant is designed to nitrify and denitrify. If the process fails (which is routine) nitrates can also pass through the system presenting a reasonable potential to exceed the Basin Plan MCL. The discharge of ammonia, nitrates and total nitrogen also presents a reasonable to cause exceedance of the Basin Plan for biostimulatory substances. Given the fact nitrification/denitrification is inherently an unstable process, the Regional Board should require continuous monitoring for ammonia to ensure that the plant is operated in a nitrification mode full-time.

Further, the Discharger is using sequencing batch reactor design for the wastewater treatment plant. Ammonia is pH and temperature dependent. Review of the literature reveals that sequencing batch reactors do have the reasonable potential to exceed water quality standards for ammonia, nitrates and total nitrogen. While sequencing batch reactors can be operated in a nitrifying mode, it does not eliminate reasonable potential and limitations are crucial to ensure that the plant is operated in a nitrification/denitrification mode. *See* USEPA's 1999 Fact Sheet on Sequential Batch Reactors.

Finally, since nitrification/denitrification is routinely employed in the Central Valley, nitrification/denitrification is BPTC and must be required in the Order, in accordance with antidegradation policy and federal regulations.

C. The Order is not consistent with the antidegradation policy.

The antidegradation analysis in the proposed 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 "major" discharge of is appalling.

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/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.)

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.

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. The conclusory, unsupported, undocumented statements in the Order are no substitute for a defensible antidegradation analysis.

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 continue with complete land disposal and install micro-filtration treatment equipment. The evaluation contains no comparative costs. 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.”

The antidegradation analysis must discuss the relative economic burden as an aggregate impact across the entire region using macroeconomics. Considering the intrinsic value of the surface water to the entire state and the potential effects upon those who rely and use surface waters, it must also evaluate the economic and social impacts to water supply, recreation, fisheries, etc. from the Discharger's degradation of water quality. It is unfortunate that the agency charged with implementing the Clean Water Act has apparently decided it is more important to protect the polluter than the environment.

There is nothing in the Order resembling an alternatives analysis evaluating less damaging and degrading alternatives. Unfortunately, the Order fails to evaluate and discuss why there is no alternative other than discharging to surface waters. A proper alternatives analysis would cost out various alternatives and compare each of the alternatives' impacts on beneficial uses.

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 almost 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.

The State Board has clearly articulated its position on increased mass loading of pollutants. 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). USEPA points out, in its 12 November 1999 objection letter to the San Francisco Regional Board concerning Tosco’s Avon refinery, that ‘[a]ny increase in loading of a pollutant to a water body that is impaired because of that pollutant would presumably degrade water quality in violation of the applicable antidegradation policy.’”

The Order states, “While the discharge is expected to degrade existing high quality groundwater with total dissolved solids, it will not likely cause an exceedance of water quality objectives or unreasonably affect the beneficial uses of underlying groundwater. Beneficial recycling of wastewater conserves freshwater resources and is encouraged by the California Water Code, Basin Plans, and State Water Board Resolution No. 77-1. Specifically, the California Legislature declares that the people of the state have primary interest in the development of recycled water facilities and that utilization of recycled water for various purposes, including recreational purposes, will contribute to the peace, health, safety, and welfare of the people of the state. The Tulare Lake Basin Plan recognizes that some degradation by salts within the basin is unavoidable. Salinity impacts to underlying groundwater will be minimized by the following project factors:

- High quality surface water will be the primary source of potable water.
- High quality surface water will recharge groundwater and mix with the discharge.”

The use of high quality water for dilution contradicts the purpose of recycling. Even with dilution, the discharge will to degrade water quality. Therefore, the Order must comply with Resolution 68-16.

State Water Board Resolution No. 68-16 requires the Regional Water Board in regulating the discharge of waste to maintain high quality waters of the State (i.e., background water quality) until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Water Board’s policies (e.g., quality that exceeds water quality objectives).

Some degradation of groundwater beneath the land application is consistent with Resolution No. 68-16 provided that:

- a. The degradation is confined within a specified boundary;
- b. The Discharger minimizes the degradation by fully implementing, regularly maintaining, and optimally operating Best Practicable Treatment and Control (BPTC) measures;
- c. The degradation is limited to waste constituents typically encountered in municipal wastewater as specified in the Groundwater Limitations of this Order; and
- d. The degradation does not result in water quality less than that prescribed in the Basin Plan.

The Order is inconsistent with Resolution 68-16 and in fact it violates every condition.

The Order fails to limit the extent of the degradation to a specified boundary in the Order. Recently adopted Regional Board Orders limit the extent of degradation to within the boundary of the monitoring well network. The Order indicates that a groundwater monitoring well network has not been installed and the background quality for the shallow groundwater has not been determined for either the golf course or Basin DE. It is not known if the shallow groundwater underlying the golf course and Basin DE is not already polluted and therefore no additional loading may be authorized. California Water Code Section 13050(1)(1) define pollution as *“an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following: (A) The waters for beneficial uses. (B) Facilities which serve these beneficial uses.”*

The golf course started operation in 1994. After a decade of using fertilizers and pesticides it may reasonably be expected that the underlying groundwater is degraded. The Order does not require the Discharger to install any groundwater wells near the golf course lakes and irrigated turf and therefore does not limit the extent of the degradation around the golf course. The Order does not analyze the effects that agricultural pumping may have on the extent of the degradation such as expanding the area of plume.

The Discharger has not performed a water balance to show what application rates are actually required not to degrade groundwater. In fact, the Order is inconsistent with other Regional Board Orders, which require “Application rates for recycled water shall not exceed agronomic rates considering the crop, soil, climate, and irrigation management system in accordance with the water balance submitted with the RWD.” Instead the Order allows the entire WWTP discharge to be applied to the golf course without considering the actual capacity of the land application area, which exacerbates the zone of degradation.

Because the DE Basin is unlined and used for recharge, nitrogen and other waste associated with the WWTP discharge will migrate and degrade the underlying groundwater. The Discharger is not using high quality water to mix in the DE Basin; rather the Discharger is using stormwater, which is likely not to meet water quality

standards. Again the Order is inconsistent with other Regional Board Orders that require “No waste constituent shall be released or discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of the Groundwater Limitations.”

The Order indicates that the discharge will degrade water quality for TDS. In order to comply with Resolution 68-16, the Discharger must demonstrate that the WWTP meets BPTC for TDS. The Discharger has failed to implement BPTC in that the Discharger has not selected treatment systems that qualify as BPTC. For example, UV systems are widely used by the industry and to comply with Regional Board Order for the disinfection of wastewater. The Order indicates that the Discharger will use chlorination to disinfect the wastewater. Chlorination increases that amount of chlorides in the wastewater. In comparison, UV systems reduce the concentration of chlorides in the effluent and therefore also reduce the concentration of TDS. Additional chemicals are also required in order to de-chlorinate the effluent (discharged to the DE Basin), which is not used with UV. Chlorination of wastewater is known to create trihalomethane. The UV system would also reduce the concentration of trihalomethane in the effluent compared to chlorination. Given the site-specific factors including recharge, groundwater quality and surface water quality, chlorination does not qualify as BPTC.

The Order requires only a grab sample to be used to monitor the effluent for chlorine residual. In comparison, it is common practice within the industry and Regional Board Orders to have continuous monitoring for chlorine residual for over a decade. In the event of a chlorine excursion detected by the continuous monitoring equipment, the flow can be easily diverted back to the effluent storage pond. Continuous monitoring equipment for chlorine, as well as other sample parameters like turbidity, pH and EC, is BPTC. Continuous monitoring is the “best control” in that it allows the Discharger to minimize the frequency and duration of effluent violations that degrade water quality. The Discharger’s contention that intermittent flows don’t allow the use of continuous monitoring is incorrect. The Discharger may employ a number of piping, pump and sump modifications may be made to the facility in order to accommodate the chlorine and other monitoring equipment.

In order to reduce TDS loadings to the WWTP, the Discharger can also install wellhead treatment for the municipal water system or seek an alternate water supply with lower TDS concentrations. Since other treatment technology may still be employed to reduce TDS, the Discharger has not demonstrated that the WWTP has implement BPTC.

The Discharger has not even performed a Pollution Prevention Study. Pollution Prevention Study is a critical element need to evaluate if BPTC. Since this WWTP is a new source, the Order writer must require the Discharger to complete a Pollution Prevention Study as part of the RWD.

The Order fails to limit waste constituents typically encountered in municipal wastewater in the Order’s Groundwater Limitations. Wastewater contains bacteria and pathogens. The Order’s groundwater limitations do not prohibit the introduction of

bacteria in groundwater. State Water Board Order No. WQO-2003-0014 upheld the Regional Water Board's interpretation of the Basin Plan with respect to implementation of the Bacteria objective, stating: "*The Basin Plan contains a water quality objective for bacteria that applies to groundwater that states: 'In groundwaters used for domestic or municipal supply (MUN) the most probable number of coliform organisms over any seven-day period shall be less than 2.2/100 mL.'* Since the groundwater is designated for municipal or domestic supply, a groundwater limitation for coliform of less than 2.2MPN/100 mL is appropriate." The Order must specify a groundwater limitation for total coliform organisms.

In addition to bacteria, the Order does not contain adequate groundwater limitations, expressed either in concentration or mass loading, for other municipal wastes such as nitrogen compounds, sodium, chlorides, boron and trihalomethanes. As discussed above, the Order is inconsistent with Regional Board Orders and allows degradation in groundwater quality more than that prescribed in the Basin Plan.

D. The Order fails to name Fresno Metropolitan Flood Control District as a fully responsible party.

Special Provision No.7 states in part that, "Notwithstanding the identification as Discharger in Finding II.B Fresno Metropolitan Flood Control District shall only be subject to the following components of this Order.

- a. Discharge Prohibitions III.A. and IIIC.
- b. Receiving Water Limitations V.A.
- c. Provisions VI.A., VI5.c. and VIC.8..."
- d.

This "special provision" is simply an illicit haven designed to protect polluters and must be deleted from the Order.

Fresno Metropolitan Flood Control District is not held liable for any effluent and groundwater limitation violations. Fresno Metropolitan Flood Control District has allowed the mixing of wastewater with stormwater in the DE Basin and is fully culpable for any violations of the Order. The resulting discharge after mixing with stormwater in the DE Basin is wastewater. We are perplexed by misguided assumptions to the contrary. The annual municipal stormwater monitoring reports submitted to the Regional Board clearly show that urban stormwater is not pollutant free water. In fact, urban stormwater is among the highest ranking sources of surface water degradation in the state. The synergistic effect that combining multiple waste constituents has on wastewater toxicity is well documented in the literature. Urban stormwater contains waste that when combined with wastewater may contribute to toxicity in the receiving waters. The Basin Plan contains a water quality standard for toxicity. Federal regulations 40 CFR 122.44 requires that NPDES Orders contain effluent limitations for any pollutant found to have the reasonable potential to exceed a water quality standard. Effluent limitations do apply to the DE Basin and the Fresno Metropolitan Flood Control District is responsible for the discharge. Furthermore, the Order recognizes that waste will be retained in the DE Basin

and that recharge of groundwater will occur. The DE Basin is unlined in order to allow groundwater recharge and wastes will inevitably migrate to the underlying groundwater. Therefore, groundwater limitations apply to the DE Basin too. Fresno Metropolitan Flood Control District is the owner and operator of the DE Basin and as such is fully responsible for any groundwater degradation that occurs from the basin.

E. The Order fails to fully comply with Title 22 Requirements.

The Order requires compliance with Title 22 and indicates that the Discharger has completed a Title 22 engineer report for recycled water application to the golf course. However, Title 22 requirements also apply to groundwater recharge, which is being performed in the DE Basin. The Discharger failed to complete a Title 22 report for recharge activities and the Order lacks comments from DHS regarding recharge. In addition, the Order fails to specify any requirements for the groundwater recharge or comments from DHS. In accordance to the MOU between DHS and the Regional Board, DHS comments regarding the Title 22 report must be incorporated into the Order. In order to comply with Title 22, the Discharger must complete a Title 22 engineer report for groundwater recharge activities and correct any deficiencies cited in the report.

F. The required receiving water monitoring is inadequate.

The Order is inconsistent Basin Plan with Regional Board Orders that require downstream receiving water monitoring in order to assess compliance with receiving water limitations. At least three receiving monitoring stations are required to properly monitor the river conditions. First an upstream location is necessary to determine background conditions. The second location is at the point of discharge from the DE Basin into the San Joaquin River (within 50 feet) and is necessary to assess compliance with the receiving water limitations. Finally, a third point further downstream approximately 500 feet from the outfall is required to assess the extent on any noncompliance and more longer term effects such dissolved oxygen sags. The Order must require the Discharger to monitor compliance with Receiving Water Limits at three locations.

G. The Order does not contain continuous chlorine monitoring for the effluent.

The Order requires only a single grab sample be collected for chlorine discharges to the river. Chlorine is highly toxic to aquatic life. It is common practice for WWTP to have continuous monitoring for chlorine residual and intermittent discharges have been easily accommodated by piping modification, sumps and pumps. During the wet season, recycled water discharges for irrigation will cease and discharge to the DE Basin will be routine. In the event of a chlorine excursion detected by the continuous monitoring equipment, the flow can be easily diverted back to the effluent storage pond. Continuous monitoring equipment for chlorine, as well as other sample parameters like turbidity, pH and EC, is BPTC in that it allows the Discharger the ability to minimize effluent violations that degrade water quality and optimize the performance of the WWTP. If the

facility will be left unmanned for any period of time, then other Regional Board Orders have mandated continuous monitoring. Without continuous monitoring equipment the Discharger cannot comply with the Federal and state Antidegradation Policy.

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:

- A. Vacate Order No. ???? (NPDES No. CA0085189) and remand to the Regional Board with instructions prepare and circulate a new tentative order that comports with regulatory requirements.

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 its 5 September 2006 letter that were accepted into the record and its oral testimony presented to the Regional Board on 21 September 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: Mr. Rene Ramirez, City of Fresno, 2600 Fresno Street, Fresno, CA 93721; Mr. Jeffrey Roberts, Copper River Ranch, LLC, 1396 W. Herndon Avenue #101, Fresno, CA 93711; Mr. William Tatham, Sr., Consolidated Land Co. and Consolidated Industries, Inc., P.O. Box 25879, Fresno, CA 93729; and Mr. Bob Van Wyk, Fresno Metropolitan Flood Control District, 5469 E. Olive Avenue, Fresno, CA 93727.

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 21 September 2006 hearing on the Order or in letters submitted to the Regional Board on 5 September 2006 that was accepted into the record.

If you have any questions regarding this petition, please contact Bill Jennings at (209) 464-5067 or Michael Lozeau at (510) 749-9102.

Dated: 21 October 2006

Respectfully submitted,



Bill Jennings, Executive Director
California Sportfishing Protection Alliance

Attachments:

- A. None. Waiting for a copy of the adopted order.