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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
Oakwood Lake Water District And Beck Properties,
Inc., Wastewater Treatment Plant, San Joaquin
County, California Regional Water Quality Control
Board – Central Valley Region Order No. R5-2006-
0114**

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) **PETITION FOR REVIEW**
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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 for Oakwood Lake Water District and Beck Properties, Inc., Wastewater Treatment Plant, San Joaquin County on 26 October 2006. *See* Order No.

R5-2006-0114. 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. R5-2006-0114, Waste Discharge Requirements for Oakwood Lake Water District and Beck Properties, Inc., Wastewater Treatment Plant, San Joaquin County. Copies of the orders adopted by the Regional Board at its 26 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:

26 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 28 September 2006. This letter, the following comments and oral remarks presented during the 26 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 Fails to Comply with the State Board's Water Quality Enforcement Policy

California Water Code (CWC) Section 13000 states, in part, that Legislature declared "...that the quality of all the waters of the state shall be protected for use and enjoyment by the people of the state." CWC Section 13000 shows the Legislature intent that "state must be prepared to exercise its full power and jurisdiction to protect the quality of the waters in the state from degradation originating inside or outside the boundaries of the state;" In order fulfill the Legislature intent to protect water quality, the State Water Resources Control Board adopted the Water Quality Enforcement Policy (Enforcement Policy) February 2002.

The Enforcement Policy states, “The primary goal of this Enforcement Policy is to create a framework for identifying and investigating instances of noncompliance, for taking enforcement actions that are appropriate in relation to the nature and severity of the violation, and for prioritizing enforcement resources to achieve maximum environmental benefits. Toward that end, it is the intent of the SWRCB that the RWQCBs operate within the framework provided by this Policy.”

The Enforcement Policy, page 13, identifies groundwater pollution as a priority violation for which the appropriate enforcement action includes an administrative civil liability order. The Order indicates, Findings No. 51 and 52, that the existing WWTP has polluted the underlying groundwater. Monitoring data shows that the groundwater around the existing WWTP exceeds water quality objectives for ammonia, nitrates, TDS and total coliform organisms. Finding No. 52 recognizes that the source for at least the total coliform organism is “may be the result of the wastewater treatment facility”. However, the Order takes no enforcement action for the groundwater pollution and does not require the Discharger to perform any cleanup activities. Instead, the Order authorizes the WWTP expansion project that will increase the existing capacity nine fold from 15,000 gpd to 136,200 gpd, which will exacerbate the pollution of the underlying groundwater. The Order completely subverts the Legislative intent for water quality protection through pollution prevention into that of pollution permission that rewards those that cause degradation.

State Board Resolution No. 92-49 establishes the policy and procedures the investigation and cleanup and abatement of discharges under Water Code Section 13304. This Policy states, in part, “It is not the intent of the State or Regional Water Boards to allow dischargers, whose actions have caused, permitted, or threaten to cause or permit conditions of pollution, to avoid responsibilities for cleanup.” These policies and procedures apply to all investigations, and cleanup and abatement activities, for all types of discharges subject to Section 13304 of the WC. The discharge of waste from the existing WWTP and the proposed new WWTP is a source of pollution that is subject to Water Code Section 13304. The Policy states “The Regional Water Board shall apply the following procedures in determining whether a person shall be required to investigate a discharge under WC Section 13267, or to clean up waste and abate the effects of a discharge or a threat of a discharge under WC Section 13304.” Furthermore, the Policy requires the Regional Board to “Ensure that dischargers are required to clean up and abate the effects of discharges in a manner that promotes attainment of either background water quality, or the best water quality which is reasonable if background levels of water quality cannot be restored...” The Regional Board has failed in every aspect of the Policy in that the Regional Board has not started an investigation or required the Discharge to cleanup and abatement the pollution. Instead of requiring the Discharger to abate the pollution the Regional Board has authorized the expansion of a facility that will exacerbate the site pollution.

The Regional Board has failed to take timely enforcement against the Discharger for the historical pollution cause by the existing WWTP. The Regional Board has

already been afforded time, several years, to issue an enforcement order but has failed to do so. Justice delayed is justice denied.

B. The Order Illegally Authorizes Pollution of the Groundwater for Total Coliform Organisms

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 groundwater underlying the WWTP and land application is polluted for total coliform organisms. Effluent Limitations No. 2.c states, "No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters." The Geoflow is situated approximately one foot below the ground surface and groundwater is predicted to reach two feet below the ground surface. According to Finding No. 43, the infiltration rates for the soil range from 0.06 to 2.0 in/hr. The Basin Plan specifies "Soil depth below the bottom of a leaching trench shall not be less than five feet..." Inadequate soil depth and high percolation rates means the discharge will reach groundwater in approximately six hours. The discharge of waste containing MPN value of more than 2.2 total coliform bacteria per 100 milliliters will exacerbate the existing site pollution. The Order's effluent limitation must be revised so that the total coliform organism concentration is less than 2.2MPN/100 mL at all times.

C. Order Fails to Comply with Title 27 Regulations

Title 27 section 20090 states, in part, "...provided that residual sludge or solid waste from the wastewater facilities shall be discharged only in accordance with the applicable SWRCB-promulgated provisions of this division." Finding No. 19 states, "Sludge will discharged to the sludge storage basin for digestion and thickening. Decant water from the basin will be returned to the SBR pond. Sludge will be hauled off-site for disposal." The WWTP process schematic, see Attachment D, clearly shows that the sludge storage is not part of the wastewater treatment plant process but is a separate process for the storage and digestion of sludge. It is common knowledge in the industry that the concentration of nitrogen compounds and other waste in sludge exceeds water quality objectives by several orders of magnitude. In fact, Title 27 section 20220 restricts the disposal of sewage treatment plant sludge to landfills that are equipped with that a leachate collection system. The storage of residual sludge from the WWTP's sequence batch reactor tank is subject to Title 27 regulation. However, the Order fails to require the Discharge to comply with Title 27 regulations as detailed below:

1. The RWD submitted by the Discharger does not contained the information required for a complete RWD as detailed in Title 27 section 21750.
2. Title 27 section 20210 requires that liquid designated waste shall only be discharged to a Class II impoundment with a double liner and leachate collection system. The sludge storage basin will receive waste sludge from the sequence batch reactor. Waste sludge is known to contain nitrogen concentrations as well as other waste over water quality objectives and is a designated waste. The Order's use of a single liner does not comply with the criteria for a Class II impoundment.
3. The sludge storage basin does not meet the site classification criteria. Title 27 section 20240 requires that "waste will be a minimum of five feet (5ft.) above the highest anticipated elevation of the underlying groundwater." Finding No. 47 states, "With a final ground surface elevation of approximately 12 feet msl, the depth to groundwater below the surface is likely to vary from 2 to 10 feet." The depth to groundwater below the bottom of the sludge storage basin is less than five feet. It is likely that at least seasonally the groundwater elevation may be in contact with the bottom of the storage basin.
4. Title 27 section 21720 requires the Regional Board to adopt waste discharge requirements that implement the applicable provisions of this title. The Order fails to implement Title 27 regulations for the sludge storage basin.

D. The Order Fails to Comply with State Board Resolution No. 68-16

The Order contends that a BPTC evaluation of the Discharger's treatment system will be conducted in the future to show compliance Resolution 68-16 BPTC. However, the Discharger WWTP already fails to comply with BTPC as follows:

1. Effluent exceeds water quality objectives and the groundwater is already been polluted by the Discharger;
2. Fails to require the Discharger to reduce salinity in the effluent to prevent degradation and does not require the Discharger to conduct a pollution prevention plan or pretreatment;
3. Uses a single HDPE lined treatment structures under the SBR and sludge basin that will degrade groundwater;
4. Fails to require continuous monitoring and have these devices tried to alarms and automatic flow diversion systems to prevent system bypass or overflow;

5. Effluent storage pond liner systems consisting of a single 40-mil HDPE;
6. Disinfection of treated effluent with chlorination and not UV;
7. Recycled water application rates which degrade water quality;
8. Geoflow discharges when soils are saturated and directly into groundwater without

The Order is for a new facility and authorizes a significant expansion. The facility has not determined Best Practicable Treatment and Control (BPTC). In order to comply with Resolution 68-16, the Discharger must demonstrate that the facility complies with BPTC, based upon current technology.

For example, Finding No. 17 states, “Disinfection will be performed by addition of hypochlorite to the sand filter effluent. Duplex hypochlorite feed units will be used for redundancy. The contact basin will be lined with a synthetic liner and will be baffled to maximize contact time.”

Chlorination results in an increase in TDS and chloride concentrations in the effluent. In addition, the chlorination of wastewater is known to create trihalomethanes. Ultraviolet Disinfection (UV) is a proven treatment technology, U.S. EPA Wastewater Technology Fact Sheet Disinfection, September 1999. UV systems are known to have the following advantages over chemical disinfection:

1. UV disinfection is effective at inactivating most viruses, spores, and cysts.
2. UV disinfection is a physical process rather than a chemical disinfectant, which eliminates the need to generate, handle, transport, or store toxic/hazardous or corrosive chemicals.
3. There is no residual effect that can be harmful to humans or aquatic life.
4. UV disinfection is user-friendly for operators.
5. UV disinfection has a shorter contact time when compared with other disinfectants (approximately 20 to 30 seconds with low-pressure lamps).
6. UV disinfection equipment requires less space than other methods.

Numerous WWTP in the Central Valley already employ UV disinfection, which does not add chloride and thus does not create trihalomethanes. For example, the City of Lodi, situated twenty minutes north, uses UV disinfection at the White Slough’s WWTP and the adjacent community of Lathrop plans to change from chlorination to UV disinfection. Other disinfection systems are also available that do not use chlorination that generates trihalomethanes. Therefore, the Discharger’s proposed disinfection system using chlorination does not comply with BPTC. In that the Regional Board may contend that the CWC prohibits the Regional Board from specifying the method of compliance. The Regional Board may adopted technology based limits to ensure compliance with

BPTC. The Order fails to include effluent limits based on BPTC and does not limit the mass loading of waste constituents generated by chlorination to a level equivalent to proven BPTC technology.

Finding No. 24 states, “Treatment ponds located at the treatment facility are described below. Recycled water storage ponds are described in the “Recycled Water Discharge” portion of this Order. A summary of the treatment facility ponds, their size, and their liners is presented in the table below:

<u>Pond</u>	<u>Size</u>	<u>Use</u>	<u>Liner</u>
SBR Pond	200,000 gallons	Wastewater Treatment	HDPE 40 mil ¹
Secondary Effluent	49,000 gallons	Flow Equalization	HDPE 40 mil ¹
Effluent Equalization	300,000	Flow Equalization/Storage	HDPE 40 mil ¹
Sludge Storage	178,000	Recycled Water Storage	HDPE 40 mil ¹
Emergency Storage	233,000 gallons	Emergency Storage	HDPE 40 mil ¹

¹ HDPE 40-mil denotes High Density Polyethylene, or equivalent.”

The Order allows the single liner for the storage of sludge which does not comply with Title 27 regulations for Class II impoundments. The groundwater underlying the WWTP is polluted as described in Finding No. 51 and 52. The wastewater in the treatment/sludge storage units will exceed water quality objectives and any leakage or overflow will exacerbate polluted groundwater conditions. The WWTP relies on single 40-mil high-density polyethylene, or equivalent, to prevent waste discharge from the listed treatment/storage units. However, single liner is simply antiquated technology with a proven track record of failure. (G. Fred Lee, PhD, PE, DEE, Deficiencies in Subtitle D Landfill Liner Failure and Groundwater Pollution Monitoring)

A single liner with hydraulic connectivity of 1×10^{-6} cms/sec (i.e. one foot per year) will likely discharge waste to the underlying shallow groundwater the first year of operation. In comparison to a single liner, a SBR package plant (numerous SBR package plant exist in California) with above ground tanks on concrete containment structures will not discharge wastewater to the soil. In addition, multiple liners systems equipped with leachate collection system or its “engineered equivalent” have been used successfully in the Central Valley for years.

The Discharger’s single liners for the SBR and Sludge lagoon will result in the discharge of waste that exacerbates the existing pollution of the underlying groundwater and cannot comply with State Board Resolution No. 68-16. While the Regional Board may not specify the method of treatment need for compliance, the Regional Board is required to ensure the WWTP complies with BPTC in developing limitations and discharge specifications (see Finding No. 59). The Order fails to include Discharge Specifications that limits the amount of leachate to comparable treatment systems, “i.e., engineered equivalent” that meet BPTC. The single liners employed by the Discharger are not technological compliant with BPTC.

Information Sheet, page 6, states, “Other constituents in domestic wastewater that may pass through the treatment process and the soil profile, include recalcitrant organic compounds, radionuclide, and pharmaceuticals”. The Order and the RWD did not monitor the effluent for these wastes. The Order fails to require that the Discharger to demonstrate that the WWTP meets BPTC for these waste.

The Order postpones a BPTC evaluation until after the new facility is operating, which not only violates the Resolution No. 68-16 but also sets the Discharger up for failure since the Discharge may have incorporated other treatment processes or design parameters in the WWTP prior to construction. The Order allows the Discharger has utilized outdated technology such, as single liners and chlorination, which clearly fails to comply with BPTC and does require the Discharge to even monitor for wastes know to pass through the treatment plant.

E. Lack of a Legally Defensible Antidegradation Analysis

There is no antidegradation analysis in the proposed Order. Conclusory, unsupported and undocumented statements cannot serve in lieu of a legally required antidegradation analysis. The Order allows the expansion of the WWTP by a factor of nine times the current flow rate contained in the previous Order No. 5-01-113.

The Fact Sheet states, “Resolution 68-16 is applied on a case-by-case, constituent-by-constituent basis in determining whether a certain degree of degradation can be justified. It is incumbent upon the Discharger to provide technical information for the Regional Board to evaluate that fully characterizes:

1. All waste constituents to be discharged;
2. The background quality of the uppermost layer of the uppermost aquifer;
3. The background quality of other waters that may be affected;
4. The underlying hydrogeologic conditions;
5. Waste treatment and control measures;
6. How treatment and control measures are justified as best practicable treatment and control;
7. The extent the discharge will impact the quality of each aquifer; and
8. The expected degree of degradation below water quality objectives.

Fact Sheet, p. 3.

The Fact Sheet then admits, “Groundwater monitoring has been conducted at the site but the area monitored is large, no systematic program for characterization was implemented, and some data was collected without sampling and analysis plans or quality assurance plans; therefore staff are unable to establish the most appropriate groundwater limits. In addition, certain aspects of wastewater treatment and control practices may not be justified as representative of Best Practicable Treatment and Control (BPTC). The Fact Sheet then observes, “[t]he proposed Order establishes interim receiving water

limitations to assure protection of the beneficial uses of groundwater of the State pending the completion of certain tasks and provides time schedules to complete specified tasks. During this period, degradation may occur from certain constituents, but can never exceed water quality objectives (or natural background water quality should it exceed objectives) or cause nuisance. Fact Sheet, p. 3.

In other words, staff doesn't know what background water quality is, the appropriate effluent limits or whether BPTC is being applied but is proposing to allow some unknown level of degradation to occur justified by some unknown benefit on the assumption that the Discharger will do in the future what is was legally responsible to do before the permit was issued. This is a blatant violation of the state's antidegradation policy.

California's antidegradation policy is composed of both the federal antidegradation policy and the State Board's Resolution 68-16. (State Water Resources Control Board, Water Quality Order 86-17, p. 20 (1986) ("Order 86-17"); Memorandum from William Attwater, SWRCB to Regional Board Executive Officers, "federal Antidegradation Policy," pp. 2, 18 (Oct. 7, 1987) ("State Antidegradation Guidance").) As part of the state policy for water quality control, the antidegradation policy is binding on all of the Regional Boards. (Water Quality Order 86-17, pp. 17-18.) Implementation of the state's antidegradation policy is guided by the State Antidegradation Guidance, SWRCB Administrative Procedures Update 90-004, 2 July 1990 ("APU 90-004") and USEPA Region IX, "Guidance on Implementing the Antidegradation Provisions of 40 CFR 131.12" (3 June 1987) ("Region IX Guidance"), as well as Water Quality Order 86-17.

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

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) and assessment of the significance of changes in ambient water quality. 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; while tertiary treatment may provide BPTC for pathogens, dissolved metals and salts 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. The conclusory, unsupported, undocumented statements in the Permit 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 current land disposal or connect to a regional facility. 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 Delta to the entire state and the potential effects upon those who rely and use Delta waters, it must also evaluate the economic and social impacts to water supply, recreation, fisheries, etc. from the Discharger's degradation of water quality in the Delta. Nor has the case been made that there is no alternative for necessary housing other than placing it where its wastewater must discharge directly into sensitive but seriously degraded waters. 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. Other communities have successfully disposed of wastes without discharging additional pollutants to degraded rivers. The discharger certainly has the option of purchasing offsets. A proper alternatives analysis would cost out various alternatives and compare each of the alternatives' impacts on beneficial uses.

There is nothing resembling an analysis buttressing the unsupported claim that BPTC is required. An increasing number of wastewater treatment plants around the country and state are employing reverse-osmosis (RO), or even RO-plus. Clearly, micro-filtration can be considered BPTC for wastewater discharges of impairing pollutants in waters already suffering serious degradation. If this is not the case, the antidegradation analysis must explicitly detail how and why run-of-the-mill tertiary system that facilitate increased mass loadings of impairing constituents can be considered BPTC.

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 containing chloride will be used by the WWTP to enhance coagulation. 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 shallow groundwater that is polluted, chlorination does not qualify as BPTC.

In the case of Thunder Valley, Placer County, the Discharger employed an RO system to treat the water supply in order to reduce TDS. The brine was hauled offsite for disposal. The City of Lathrop *Final EIR, Lathrop Water, Wastewater, and Recycled Water Master Plan* identifies “wellhead treatment” as a mitigation measure to reduce salinity discharges. It is obvious that BPTC measures for TDS are available.

There is nothing in the Order resembling an analysis that ensures that existing beneficial uses are protected and in fact have been already polluted by the Discharger existing WWTP. While the Order identifies several constituents that may impair the receiving waters, it fails to discuss how and to what degree the identified beneficial uses will be additionally impacted by the discharge. 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 impairing 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 allows for nine fold increase in mass loading of waste, most of which was not even sampled and analyzed for in the RWD. Unsupported conclusory claims that the Permit somehow complies with State Board Resolution 68-16 in the absence of a defensible reasonable potential analysis cannot comply with regulatory requirements and cannot be protective of an already degraded groundwater basin.

F. The Order's Reasonable Potential Analysis is inadequate and Groundwater Limitations are not protective

The Order fails to include any reasonable potential analysis for determining protective groundwater limitations. In this case the shallow groundwater is already polluted for a number of constituents by the Discharger and therefore has no assimilative capacity for further degradation. However, the Order inexplicably allows for addition degradation and pollution.

The Regional Board the standard list of potential constituents in the effluent (i.e., TDS, nitrogen compounds, salinity compounds, total coliform organisms, and trihalomethanes), other potential pollutants must be evaluated in any defensible reasonable potential analysis. For example, Information Sheet, page 6, states, "Other constituents in domestic wastewater that may pass through the treatment process and the soil profile, include recalcitrant organic compounds, radionuclide, and pharmaceuticals". The Order failed to monitor for these waste and did not set either effluent or ground water limitations for them. In addition, we have provided the Regional Board with a brief review of the constituents found in several domestic water supply systems in the Central Valley in order to indicate that there exist a potential for numerous other contaminants to exist in the effluent. The Order fails to discuss the presence and concentration of potential constituents in the source water and effluent and contain a defensible reasonable potential analysis.

We have noted that the Regional Board's orders for Non-15 facilities (Sacramento Office) adopted over the past several years all contain the same groundwater limitations, which are set at the water quality objective or in other words the maximum assimilative capacity of the water body for each particular constituent regardless of BPTC measures employed or available. These constituents (TDS, nitrogen compounds, salinity compounds, total coliform organisms, and trihalomethanes) are the same in each Order regardless of the treatment systems used, BPTC available or the quality of the site's groundwater. We have not seen a single Order in past year, in which the groundwater limitation has actually been, reduced to less than the maximum assimilative capacity despite the Regional Boards empty assurances that a BPTC evaluation will be conducted at some future date. Nor, have we found that proper reasonable potential analyses have been conducted in order to justify the groundwater limitations or, for that matter, that all the chemical constituents (see Finding No. 67 & 68) are even monitored for in the wastewater. The Regional Boards application of a boilerplate groundwater limitation is simply an illegal form of underground regulations, which are intended to subvert Resolution No 68-16 and prevent the implementation of BPTC.

G. Order fails to Comply CWA discharges to surface waters

During the Regional Board hearing, Regional Board staff acknowledged that at least seasonally the groundwater underlying the WWTP is hydraulically connected to river. Wastewater discharged from the WWTP treatment units that use a single liner will therefore also be hydraulically connected to the river. The Order is not an NPDES permit and it is illegal to issue a WDR for the discharge of waste to surface water.

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. R5-2006-0114 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 28 September 2006 comment letter that was accepted into the record and our oral testimony presented to the Regional Board on 26 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 Mr. Thomas Sani, Beck Properties, Inc., 3114 West Hammer Lane, Stockton, CA 95209 and Mr. Mike Gilton, District Engineer, Oakwood Lake Water District, 2541 East Canal Drive, Turlock, CA 95380.

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 26 October 2006 hearing on the Order or in comments submitted to the Regional Board on 28 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,

A handwritten signature in black ink, appearing to read "Bill Jennings". The signature is written in a cursive, flowing style.

Bill Jennings, Executive Director
California Sportfishing Protection Alliance

Attachments:

A. Order No. R5-2006-0114