



California Sportfishing Protection Alliance

"An Advocate for Fisheries, Habitat and Water Quality"

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Dr. Karl Longley, Chairman
Ms. Pamela Creedon, Executive Officer
Mr. Kenneth Landau, Assistant Executive Officer
Mr. Dane Mathis, Engr. Geol.
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6144

VIA: Electronic Submission
Hardcopy if Requested

RE: Waste Discharge Requirements (NPDES No. CA0078867) for Berry Petroleum Company, Poso Creek/McVan Facility, Poso Creek Oil Field, Kern County

Dear Messrs. Longley, Landau, Mathis and Ms. Creedon:

The California Sportfishing Protection Alliance and Watershed Enforcers (CSPA) has reviewed the Central Valley Regional Water Quality Control Board's (Regional Board) tentative NPDES permit (Order or Permit) for Berry Petroleum Company, Poso Creek/McVan Facility, Poso Creek Oil Field (Discharger) and submits the following comments.

CSPA requests status as a designated party for this proceeding. CSPA is a 501(c)(3) public benefit conservation and research organization established in 1983 for the purpose of conserving, restoring, and enhancing the state's water quality and fishery resources and their aquatic ecosystems and associated riparian habitats. CSPA has actively promoted the protection of water quality and fisheries throughout California before state and federal agencies, the State Legislature and Congress and regularly participates in administrative and judicial proceedings on behalf of its members to protect, enhance, and restore California's degraded surface and ground waters and associated fisheries. CSPA members reside, boat, fish and recreate in and along waterways throughout the Central Valley, including Kern County.

- 1. The proposed Permit, Fact Sheet, No. E., Compliance Summary, states that: "Order No. 5-01-133 contains an effluent flow limitation of 0.42 mgd. Review of effluent monitoring data from August 2003 through August 2005 indicates there were 26 instances where the effluent flow limitation was exceeded. No other effluent limitation exceedances were documented."**

The penalty assessed by the Regional Board for violating the flow limitation 26 times is simply to increase the allowable flow rate in the proposed Permit. Apparently

there has been no enforcement effort over the life of the permit by the Regional Board to require compliance with the existing NPDES permit.

- 2. Proposed Permit Finding No. N and the Fact Sheet at page F-19 No. 4, incorrectly conclude that: "...the permitted discharge is consistent with the antidegradation provision of Section 131.12 and State Water Board Resolution No. 68-16" and in accordance with CWC Section 13377 and Federal Regulation, 40 CFR 122.4 (a), (d) and (g) the proposed Permit cannot be adopted until a complete antidegradation analysis is conducted and the permit is modified to fully protect beneficial uses and comply with the antidegradation policy.**

The proposed Permit allows for a significant increase in the flow rate from 0.42 mgd to 1.68 mgd which results in an increase of 400% of the mass of pollutants being discharged. Based on the allowable increased flow rate the mass of all constituents discharged will increase by 400% ($1.68/0.42 = 4$). The proposed Permit significantly miscalculates the mass of pollutants being discharged in the Effluent Limitations section, however will actually allow the following mass of pollutants to be discharged:

<u>Constituent</u>	<u>Limitation (mg/l)</u>	<u>Mass¹ (lbs/day)</u>
Chloride	175	2453
Boron	1	14
<u>Oil and Grease</u>	35	491

¹mass = limit (mg/l) x flow (mgd) x conversion factor (8.34)

The proposed Permit contains an Effluent Limitation for electrical conductivity (EC) of 1,000 umhos/cm; the mass of salts being discharged will also be increased by 400%.

- 3. The antidegradation analysis in the proposed permit does not discuss or assess the 400% increased mass of pollutants being discharged to surface waters or groundwater.**

The proposed Permit, section 3 D. Final Effluent Limitations, 3, Satisfaction of Anti-Backsliding Requirements, states that: "Some effluent limitations in this Order are less stringent than those in the previous Order. As discussed below, this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations. The effluent limitations for EC, chloride, and boron are being increased from the limitations in Order No. 5-01-133 which were more stringent than required by the Basin Plan and in previous permits for this Facility. The Discharger requested the limits be returned to 1,000 umhos/cm for EC, 175 mg/L for chloride, and 1.0 mg/L for boron, as specified in Order No. 95-153, adopted 23 June 1995. For Order 5-01-133, the final effluent limits were based on oil recovery methods utilized at the time, maximum reported effluent flow rates, and the characteristics of the discharge. Operations have substantially changed at the Facility since the last Order was adopted. Modifications have included the use of steam flooding which increases oil recovery and

therefore results in an increase of produced water for treatment and discharge. 40 CFR 122.44(l)(1) allows the relaxation of effluent limitations for technology-based effluent limits if circumstances upon which the previous permit was based have materially and substantially changed since the time the permit was issued.” Relaxation of the concentration-based limitations will result in an increase of the mass of constituents discharged. **The antidegradation analysis in the proposed permit does not discuss or assess the increased mass of pollutants being discharged to surface waters or groundwater due to the relaxation of the concentration limitations.**

With respect to groundwater, the proposed Permit states: “The groundwater basin of the Kern County portion of the San Joaquin Valley is a basin of interior drainage with no appreciable surface or subsurface outflow. For 1998, the KCWA reports that surface water supplies provided about 504,100 tons of salts into the basin. Groundwater extractions were calculated to be about 1,290,200 acre-feet in 1998 (including oil field produced water). KCWA reports that an average of about 25 percent of applied water percolates through the soil profile and reaches the groundwater. Review of water quality maps prepared by the KCWA suggests that the groundwater beneath the Facility has a TDS concentration less than 500 mg/L.” Since the Discharger utilizes percolation/evaporation for part of the discharge; approximately 25% of the applied wastewater will reach groundwater; the groundwater TDS is less than 500 mg/l; and the discharge EC limitation is 1,000 umhos/cm; it is reasonable that the discharge has degraded groundwater quality. The proposed Permit does not contain Groundwater Limitations other than for EC and does not require groundwater monitoring. **The antidegradation analysis in the proposed permit does not discuss or assess groundwater degradation from the discharge of salt or other pollutants by percolation.**

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.). The proposed Permit Fact Sheet finds that the increased degradation to surface waters and groundwater “are in the best interest of the people of the state of California” without a single shred of information or documentation other than it allows the Discharger to expand their flow rate. The impacts of increased oil production are widely disputed as to the merits of depleting oil reserves, increased reliance of fossil fuels, continuing increases in air emissions and the list continues. The Regional Board staff’s conclusions are made without any analysis of the environmental tradeoffs for increasing the mass of pollutants to surface waters and groundwater, the only assessment that appears to have been made is that the Discharger continuously violated their permit flow rates, without penalty, and they requested an expansion in flows for the renewed permit.

The antidegradation analysis in the proposed Permit is simply deficient and in reality nonexistent. The brief discussion of antidegradation requirements, in the Findings and Fact Sheet, consist only of skeletal, unsupported, undocumented conclusory

statements totally lacking in any factual analysis. The failure to undertake a rigorous antidegradation analysis for an increased discharge of pollutants 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 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 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; 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. 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 Permit. There are viable alternatives that have never been analyzed. The proposed Permit contains no comparative costs. 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 resembling an analysis buttressing the unsupported claim that BPTC is required. An increasing number of wastewater treatment systems around the country and state are employing reverse-osmosis (RO), such is not discussed in the proposed Permit.

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.

Alternatively, Tier 1 requires that existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. By definition, any increase in the discharge of impairing pollutants to impaired waterways unreasonably degrades beneficial uses and exceeds applicable water quality standards. Prohibition of additional mass loading of impairing pollutants is a necessary stabilization precursor to any successful effort in bringing an impaired waterbody into compliance.

The proposed increase in pollutant mass loading will inescapably and detrimentally affect aquatic life, contribute to violations of water quality standards and increase the risks and costs to the millions of people who depend upon surface water and groundwater for their drinking/irrigation/recreation water. The proposed Permit should not be adopted until a complete antidegradation analysis and the permit is modified to fully protect beneficial uses and comply with the antidegradation policy.

4. The proposed Permit fails to contain an Effluent Limitation for zinc in accordance with Federal Regulations 40 CFR 122.44 and California Water Code, Section 13377.

The California Water Code (CWC), Section 13377 states in part that: "...the state board or the regional boards shall...issue waste discharge requirements... which apply and ensure compliance with ...water quality control plans, or for the protection of beneficial uses..." Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. The proposed Permit Fact Sheet, page F-17, states that the water quality criterion for zinc is 12 ug/l. Zinc was detected in the discharge at 16 ug/l. The discharge presents a reasonable potential to exceed the water quality standards for zinc. Failure to include an effluent limitation for zinc in the proposed permit violates 40 CFR 122.44 and CWC 13377.

5. The proposed Permit fails to comply with Federal Regulations, 40 CFR 122.44(l) by improperly relaxing Effluent Limitations for EC, chloride, and boron.

The proposed Permit, section 3 D. Final Effluent Limitations, 3, Satisfaction of Anti-Backsliding Requirements, states that: "Some effluent limitations in this Order are less stringent than those in the previous Order. As discussed below, this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations. The effluent limitations for EC, chloride, and boron are being increased from the limitations in Order No. 5-01-133 which were more stringent than required by the Basin Plan and in previous permits for this Facility. The Discharger requested the limits be returned to 1,000 umhos/cm for EC, 175 mg/L for chloride, and 1.0 mg/L for boron, as specified in Order No. 95-153, adopted 23 June 1995. For Order 5-01-133, the final effluent limits were based on oil recovery methods utilized at the time, maximum reported effluent flow rates, and the characteristics of the discharge.

Operations have substantially changed at the Facility since the last Order was adopted. Modifications have included the use of steamflooding which increases oil recovery and therefore results in an increase of produced water for treatment and discharge. 40 CFR 122.44(l)(1) allows the relaxation of effluent limitations for technology-based effluent limits if circumstances upon which the previous permit was based have materially and substantially changed since the time the permit was issued.”

Federal Regulation 40 CFR 122.44(l) requires that renewed permits contain effluent limitations at least as stringent in the previous permit. The cited exception to 40 CFR 122.44 allows relaxation of an effluent limitation if material and substantial modifications or addition to the permitted facility occurred after permit issuance which justifies the application of a less stringent limitation. As is stated above, the Fact Sheet states that: “Modifications have included the use of steamflooding which increases oil recovery and therefore results in an increase of produced water for treatment and discharge.” There is no information that this technology or process modification results in higher concentrations of pollutants as was presented as the basis for the previous permit, only increased flow. There is also no evidence that the Discharger has evaluated different treatment technologies to achieve compliance with the effluent limitations. The Basin Plan, the source of the water quality standards in question, has not been modified for these constituents since the previous permit renewal. The case has not been made which justifies relaxation of effluent limitations in accordance with 40 CFR 122.44(l) and the proposed Permit must be amended to include effluent limitations at least as stringent in the previous permit.

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

Federal regulations, at 40 CFR 122.44 (d)(1)(i), require that limitations must control all pollutants or pollutant parameters which the Director determines are or may be discharged at a level which will cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. The Basin Plan Water Quality Objective for Toxicity is a narrative criteria which states that all waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This section of the Basin Plan further states, in part that, compliance with this objective will be determined by analysis of indicator organisms.

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

For an ephemeral or low flow stream, which is the cited case here, allowing 30% mortality in acute toxicity tests allows that same level of mortality in the receiving stream, in violation of federal regulations and contributes to exceedance of the Basin

Plan's narrative water quality objective for toxicity. Accordingly, the proposed Permit must be revised to prohibit acute toxicity in accordance with Federal regulations, at 40 CFR 122.44 (d)(1)(i).

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

Proposed Permit states with regard to the State Implementation Policy states that: "On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP." The SIP, Section 4, Toxicity Control Provisions, Water Quality-Based Toxicity Control, states that: "A chronic toxicity effluent limitation is required in permits for all dischargers that will cause, have a reasonable potential to cause, or contribute to chronic toxicity in receiving waters."

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

The proposed Permit is quite simply wrong; by failing to include effluent limitations prohibiting chronic toxicity the proposed Permit does not "...implement the

SIP”. Accordingly, the proposed Permit must be revised to prohibit chronic toxicity in accordance with Federal regulations, at 40 CFR 122.44 (d)(1)(i) and the SIP.

- 8. The proposed Permit is based on an incomplete Report of Waste Discharge (RWD) and in accordance with Federal Regulations 40 CFR 122.21(e) and (h) and 124.3 (a)(2) the State’s Policy for Implementation of Toxics standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP) and California Water Code Section 13377 the permit should not be issued until the discharge is fully characterized and a protective permit can be written.**

There is no information in the proposed Permit to indicate that the wastewater discharge has been characterized for California Toxics Rule (CTR), National Toxics Rule (NTR), drinking water MCLs and other pollutants which could degrade the beneficial uses of the receiving stream and exceed water quality standards and objectives. The proposed Permit does not contain a complete list of CTR, NTR, drinking water MCLs and other pollutants which would indicate that the Regional Board is basing the proposed Permit on adequate information. For the last several years the Regional Board’s NPDES permits have contained a spreadsheet detailing the priority pollutant sampling which has, or has not, been monitored. Absent this spreadsheet, one can only conclude that the required priority pollutant sampling, which is necessary to characterize the discharge, has not been conducted. The absence of data is contrary to precedential Water Quality Order WQO 2004-0013 for the City of Yuba City, “The findings or Fact Sheet should cite the specific data on which it relied in its calculations.”

The SIP required the Regional Board’s to require dischargers to characterize their discharges for priority pollutants. The Regional Board mailed out a California Water Code Section 13267 letters to dischargers requiring sampling for priority pollutants. There is no indication that any this data was ever received or that it was utilized in preparing the proposed permit.

SIP Section 1.3 requires that the Regional Board conduct a reasonable potential analysis for each priority pollutant to determine if a water quality-based Effluent Limitation is required in the permit. Absent the data, the Regional Board cannot possibly comply with SIP requirement of Section 1.3. There is no analysis or discussion in the proposed Permit which indicates the Regional Board complied with the requirements of SIP Section 1.3. Failure to include this information, if received, would be in violation of Federal Regulation 40 CFR 124.8 (A)(2) which requires Fact Sheets contain an assessment of the wastes being discharged.

Federal Regulation, 40 CFR 122.21(e) states in part that: “The Director shall not issue a permit before receiving a complete application for a permit except for NPDES general permits. In accordance with 40 CFR 122.21 (e) and (h) and 124.3 (a)(2) the Regional Board shall not adopt the proposed permit without first a complete application, in this case for industrial landfill, for which the permit application requirements are extensive. An application for a permit is complete when the Director receives an

application form and any supplemental information which are completed to his or her satisfaction. The completeness of any application for a permit shall be judged independently of the status of any other permit application or permit for the same facility or activity.”

State Report of Waste Discharge form 200 is required as a part of a complete Report of Waste Discharge. Form 200, part VI states that: “To be approved, your application must include a complete characterization of the discharge.” The Federal Report of Waste Discharge forms also require a significant characterization of a wastewater discharge. Federal Regulation, 40 CFR 122.21(g)(7) requires for existing manufacturing, commercial or mining facilities that a significant list of priority pollutants be sampled to characterize the effluent discharge. This has apparently not been completed.

As the proposed Permit states; the California Toxics Rule (CTR)(40 CFR 131, Water Quality Standards) contains water quality standards applicable to this wastewater discharge. The final due date for compliance with CTR water quality standards for all wastewater dischargers in California is May 2010. The State’s *Policy for Implementation of Toxics standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP), Section 1.2, requires wastewater dischargers to provide all data and other information requested by the Regional Board before the issuance, reissuance, or modification of a permit to the extent feasible.

Federal Regulation, 40 CFR 122.21(e) states in part that: “The Director shall not issue a permit before receiving a complete application for a permit except for NPDES general permits.

California Water Code, section 13377, requires that: “Notwithstanding any other provision of this division, the state board and the regional boards shall, as required or authorized by the Federal Water Pollution Control Act, as amended, issue waste discharge and dredged or fill material permits which apply and ensure compliance with all applicable provisions of the act and acts amendatory thereof or supplementary, thereto, together with any more stringent effluent standards or limitations necessary to implement water quality control plans, or for the protection of beneficial uses, or to prevent nuisance.”

The application for permit renewal is incomplete, or the information utilized to write the proposed Permit is incomplete, and in accordance with the CWC, Federal Regulations and the SIP the proposed Permit should not be adopted.

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

The proposed Permit Fact Sheet, F-11 Receiving Water Temperature, cites that between July 2004 and November 2005 the temperature of the effluent discharge to

surface waters was approximately 116° F and 120° F. Also stated in the proposed Permit the receiving stream is designated as having warm freshwater habitat (WARM), cold freshwater habitat (COLD), wildlife habitat (WILD) beneficial uses. The proposed Permit also contains Receiving Water Limitation No 13, which prohibits the discharge of toxic substances to be present, individually or in combination, in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Temperatures at 116° F and 120° F will be toxic and produce detrimental physiological responses in aquatic life.

The California Water Code (CWC), Section 13377 states in part that: "...the state board or the regional boards shall...issue waste discharge requirements...which apply and ensure compliance with ...water quality control plans, or for the protection of beneficial uses..." Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter. Failure to include a numeric effluent limitation for temperature in the proposed permit violates 40 CFR 122.44 and CWC 13377.

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

The proposed Permit contains an Effluent Limitation for oil and grease of 35 mg/l which allows for the discharge to surface waters of 490 lbs/day under the increased flow limit of 1.68 mgd. The California Water Code (CWC), Section 13377 states in part that: "...the state board or the regional boards shall...issue waste discharge requirements...which apply and ensure compliance with ...water quality control plans, or for the protection of beneficial uses..." Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter. Failure to include an effluent limitation for oil and grease in the proposed permit violates 40 CFR 122.44 and CWC 13377. Oil and grease is highly toxic to aquatic life: toxic at concentrations as low as 0.1 mg/L and sublethal toxicities are reported at 10-100 µg/L. In fact, it has been shown that petroleum products can harm aquatic life at concentrations as low as 1 µg/l. Oil and grease is also persistent, bioaccumulative and highly toxic in sediment. The USEPA's water quality standard for oil and grease is stated as: "a) 0.01 of the lowest continuous flow 96-hour LC50 to several important freshwater and marine species, each having a demonstrated high susceptibility to oils and petrochemicals, b)

Levels of oils or petrochemicals in the sediment which cause deleterious effects to the biota should not be allowed and c) surface waters shall be virtually free from floating nonpetroleum oils of vegetable or animal origin, as well as petroleum-derived oils.” Goldbook, 1986, Quality Criteria for Water, EPA 440/5-86-001. A table summarizing lethal toxicities of various petroleum products to aquatic life can be found in EPA’s 1976 Quality Criteria for Water (Redbook, pp 210-215). The Basin Plan’s narrative limit for oil and grease is stated as “[w]aters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.” Basin Plan, III-5.00.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Bill Jennings". The signature is fluid and cursive, with a large initial "B" and "J".

Bill Jennings, Executive Director
California Sportfishing Protection Alliance