

California Sportfishing Protection Alliance

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VIA: Electronic Submission

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3 March 2009

Ms. Jeanine Townsend Clerk to the Board State Water Resources Control Board 1001 "I" Street, 24th Floor [95814] P.O. Box 100 Sacramento, CA 95812-010 commentletters@waterboards.ca.gov

RE: Comments to A-1846(a) and A-1846(b) – March 17, 2009 Board Meeting: Proposed Order: Petitions of California Sportfishing Protection Alliance and Environmental Law Foundation Regarding Waste Discharge Requirements and Time Schedule Order for City of Tracy, Central Valley Water Board

Dear Ms. Townsend and Board:

Thank you for the opportunity to comment on the Draft Order SWRCB/OCC File No. A-1846 (a) and (b) regarding our petition of the City of Tracy's NPDES permit. We concur with the findings and requirements of the Draft Order with several significant exceptions, for which we provide the following comments.

1. The Draft Order fails to address that the Permit contains an inadequate antidegradation analysis that does not comply with the requirements of Section 101(a) of the Clean Water Act, Federal Regulations 40 CFR § 131.12, the State Board's Antidegradation Policy (Resolution 68-16) and California Water Code (CWC) Sections 13146 and 13247.

The Draft Order, Footnote No. 1, cites a petition by the Environmental Law Foundation (ELF) of the City of Tracy's NPDES Permit principally with regard to Antidegradation Policy matters; but fails to note our petition of these issues. We are fully supportive of ELF's petition of the permit. The Footnote states that the State Board has initiated a review of the application of the Antidegradation Policy and such issues are not considered in the Draft Order and are dismissed. The Draft Order fails to recognize that compliance with the Antidegradation Policy also implies compliance with the cited Federal Regulations and CWC requirements to comply with applicable Policies. A review of application does not eliminate the requirement to comply with the Policy and Federal Regulation. Our Petition raised serious deficiencies in the NPDES permit with regard to compliance with the Antidegradation Policy and hence the applicable Federal Regulations.

CWC Sections 13146 and 13247 require that the Board in carrying out activities which affect water quality shall comply with state policy for water quality control unless otherwise directed by statute, in which case they shall indicate to the State Board in writing their authority for not complying with such policy. The State Board has adopted the Antidegradation Policy (Resolution 68-16), which the Regional Board has incorporated into its Basin Plan. The State and Regional Boards are required by the CWC to comply with the Antidegradation Policy.

Section 101(a) of the Clean Water Act (CWA), 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 CWA 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 (40 CFR § 131.12(a)) 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. California's antidegradation policy is composed of both the federal antidegradation policy and the State Board's Resolution 68-16

The Permit Antidegradation discussion does not recognize the fact that the industrial discharges likely contribute the principal salt load. The Antidegradation analysis does not state that with respect to salts that the EC, principally discharged by a local industry, is not a discussion of best practicable treatment and control (BPTC) of the discharge at the wastewater treatment plant, but instead a failure of the industrial pretreatment program. Failure to control local industries is not BPTC.

Two significant expansions of the wastewater treatment plant are discussed in the Order with significant increases in the mass of pollutants discharged that are not specifically discussed in the Permit. For example, the antidegradation analysis fails to adequately discuss the significant increase in oxygen demanding substances or available best practicable treatment or control of the discharge of these substances. The Permit allows a 78% increase in mass loading of nitrate and a 77% increase in mass loading of phosphorous. This translates to an additional 187 lbs/day of nitrate and 186 lbs/day of phosphorus discharged from the expanded wastewater treatment plant. The Permit establishes that receiving waters are impaired for dissolved oxygen. Nitrogen and phosphorus are the primary contributors to eutrophication and increased mass loading of these constituents will cause a further oxygen demand on an already impaired waterbody. Nitrogen and phosphorus can be treated and removed from the discharge through readily available technologies. Failure to employ these commonly used technologies will cause, and significantly contribute to, violation of the water quality objective for dissolved oxygen, yet the Permit is silent in discussing this issue. Mass limitations have been removed from the effluent limitations section of the Order, which are the principal means of analyzing degradation. The Permit states that the allowed increase in toxic pollutants will not cause significant impacts to aquatic life, which is the beneficial use most likely affected by the pollutants discharged (e.g. from temperature and metals) conflicts with the information contained in Table F-1 which shows numerous toxic pollutants which would significantly increase, for example copper concentrations are projected to increase by 54%.

The Draft Order should be revised to address the requirements of the Antidegradation Policy and compliance with the applicable Federal Regulations and the California Water Code.

2. We concur with the Draft Order Finding and requirement to add a final Effluent Limitation for electrical conductivity (EC). The Draft Order should reflect, however, that the problems at Tracy associated with excessive salts (EC) is caused by the discharge of food processing wastewater from Leprino Foods.

As was presented in our petition: "Based on the information in the Antidegradation Analysis, Salinity, EC and TDS discussions of Attachment F, the significant portion of salinity is discharged by an industrial discharger, Leprino Foods. The salinity discussion of Leprino Foods states: "Leprino discharges an additional salt load to the Facility. Leprino provides preliminary treatment of its wastewater to reduce the high organic loading typical of food processing waste. However, no treatment is provided to reduce the high salt loading. The industrial wastewater is discharged to the Discharger's industrial treatment facility, which includes 52 acres of unlined industrial ponds, and is returned to the main treatment facility at the primary sedimentation tanks. The industrial ponds provide significant residence time. While in the industrial ponds. salts are concentrated through the evaporation of the wastewater. In addition, the Discharger wastes high TDS process water from the main treatment facility to the industrial ponds, such as digester supernatant, pump seal water, boiler cooling water, etc. Based on data provided by the Discharger from January 2003 through December 2004, the industrial wastewater discharged to the industrial ponds has an average TDS of about 1000 mg/L, but triples to an average TDS of over 3000 mg/L by the time the wastewater is returned to the main facility. This results in a significant salt load to the main treatment facility, and ultimately to Old River." Based on the municipal drinking water supply average TDS concentration of 450 mg/l, without the significant industrial discharges of salt, the municipal wastewater could be very close to compliance with EC and TDS limitations." It is imperative that the State Board members and the public be aware that the problems associated with salt (EC) at Tracy are primarily caused by the discharge of food processing wastewater from Leprino Foods. Strict enforcement of the Industrial Pretreatment Program, requiring Leprino Foods to reduce their contribution of salt loading to the wastewater treatment plant, could resolve the EC issues with virtually no impact to the City.

3. The Draft Order fails to discuss the requirements of California Code of Regulations (CCR) Title 27 for the disposal of sludge that has degraded groundwater quality contrary to the Antidegradation Policy, Resolution 68-16.

The Permit, Fact Sheet states that sludge is discharged to unlined drying beds and "...historical sludge handling practices unreasonably degraded groundwater." While domestic wastewater may be exempted from Title 27, under certain circumstances, sludge is not exempt. CCR Title §20090, Exemptions, (C15: §2511) states: The following activities shall be exempt from the SWRCB-promulgated provisions of this subdivision, so long as the activity meets, and continues to meet, all preconditions listed: (a) **Sewage**—Discharges of domestic sewage or treated effluent which are regulated by WDRs issued pursuant to Chapter 9, Division 3, Title 23 of this code, or for which WDRs have been waived, and which are consistent with applicable water quality objectives, and treatment or storage facilities associated with municipal wastewater treatment plants, provided that residual sludges or solid waste from wastewater treatment facilities shall be discharged only in accordance with the applicable SWRCB-promulgated provisions of this division. CCR Title 27, Table 2.1, requires undewatered sewage sludge to be disposed at a Class

II surface impoundment and dewatered sludge to be disposed at a Class III landfill. According to the Regional Board's permit, groundwater has been degraded and unlined drying beds, where groundwater has been degraded by these sludge disposal practices, does not meet the requirements of Title 27.

In addition to non-compliance with title 27, the Board's Antidegradation Policy, Resolution 68-16, requires the application of best practicable treatment and control (BPTC) of the discharge. The disposal and storage of sludge to unlined drying beds has degraded groundwater. The wastewater industry standard is to mechanically dewater sludge with immediate removal to a proper disposal area, typically a landfill. Dewatering sludge with removal to a landfill is BPTC. The discussion concerning biosolids dewatering, in Attachment F, page 16, states that the facility currently degrades groundwater quality with their practice of discharging sludge to sand lined drying beds. It is not BPTC to pave the sludge drying bed with a "relatively impermeable" barrier of asphaltic concrete. A "relatively impermeable" barrier will still allow wastes to migrate to groundwater and is not best practicable treatment and control (BPTC) of the discharge. Completely impermeable lining materials are readily available and would prohibit pollutant migration to groundwater. A "relatively impermeable" barrier is not BPTC. The Order should be revised to require BPTC for discharges to groundwater.

The Draft Order should require the Permit be modified to require elimination of groundwater degradation and compliance with CCR Title 27 and the Antidegradation Policy for the disposal of sludge.

4. The Draft Order does not discuss that a significant number of the Effluent Limitations are not limited for mass.

Most of the Effluent Limitations in the City of Tracy's permit do not have associated mass limitations. Federal Regulation, 40 CFR 122.45 (b) requires that in the case of POTWs, permit Effluent Limitations, standards, or prohibitions shall be based on design flow. Concentration is not a basis for design flow. Mass limitations are concentration multiplied by the design flow and therefore meet the regulatory requirement. Mass limitations are required by Federal regulations, 40 CFR 122.45(f). 40 CFR §122.45(f) states that: "All pollutants limited in permits shall have limitations...expressed in terms of mass except...[f] or pH, temperature, radiation, or other pollutants which cannot appropriately be expressed by mass...Pollutants limited in terms of mass additionally may be limited in terms of other units of measurement, and the permit shall require the permittee to comply with both limitations."

U.S. EPA's Technical Support Document for Water Quality-Based Toxics Control (TSD), states in section 5.7.1, pp. 110-111 that:

"Mass-based effluent limits are required by NPDES regulations at 40 CFR 122.45(f). The regulation requires that all pollutants limited in NPDES permits have limits, standards, or prohibitions expressed in terms of mass with three exceptions, including one for pollutants that cannot be expressed appropriately as mass. Examples of such pollutants are pH, temperature, radiation, and whole effluent toxicity. Mass limitations in terms of pounds per day or kilograms per day can be calculated for all chemical-specific toxics such as chlorine or chromium. Mass-

based limits should be calculated using concentration limits at critical flows. For example, a permit limit of 10 mg/l of cadmium discharged at an average rate of 1 million gallons per day also would contain a limit of 38 kilograms/day of cadmium.

Mass-based limits are particularly important for control of bioconcentratable pollutants. Concentration-based limits will not adequately control discharges of these pollutants if the effluent concentrations are below detection levels. For these pollutants, controlling mass loadings to the receiving water is critical for preventing adverse environmental impacts.

However, mass-based effluent limits alone may not assure attainment of water quality standards in waters with low-dilution. In these waters, the quantity of effluent discharged has a strong effect on the instream dilution and therefore on the RWC [receiving water concentration]. At the extreme case of a stream that is 100 percent effluent, it is the effluent concentration rather than the effluent mass discharge that dictates the instream concentration. Therefore, EPA recommends that permit limits on both mass and concentration be specified for effluents discharging into waters with less than 100 fold dilution to ensure attainment of water quality standards."

In addition to the above citations, on June 26th 2006 U.S. EPA, Mr. Douglas Eberhardt, Chief of the CWA Standards and Permits Office, sent a letter to Dave Carlson at the Central Valley Regional Water Quality Control Board strongly recommending that NPDES permit effluent limitations be expressed in terms of mass as well as concentration.

5. The Draft Order does not address a potential unpermitted wastewater discharge to surface water, Sugar Cut Slough.

The original tentative Permit issued by the Regional Board contained Provision (2d) and a Sugar Cut Slough Monitoring Study. The Provision stated that: "In a June 1995 report prepared by CH2M Hill for the Discharger, it was concluded that the ponds leak to the shallow groundwater and the groundwater is in hydraulic connection with Sugar Cut Slough." The Provision then stated, in part: "...additional monitoring is necessary to determine if the unlined ponds are in hydraulic continuity and if they are affecting water quality in Sugar Cut Slough." According to the original tentative permit the Discharger's consultants concluded that there is hydraulic continuity between wastes from the facility and with surface waters.

The adopted Permit is absent references to the pond leakage and any work plan without explanation. However, the Clean Water Act and California Water Code §13376 clearly requires submittal of a Report of Waste Discharge for a discharge of waste to surface waters. There is sufficient information to conclude that waste material, regardless of quality, is being discharged to surface waters from leaking wastewater ponds. The Draft Order should require Regional Board amend the Permit to discuss the potentially illegal discharge to Sugar Cut Slough.

Sincerely,

Bill Jennings, Executive Director California Sportfishing Protection Alliance

Service List Cc:

Interested Parties