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27 February 2011

Mr. Ken Landau, Assistant Executive Officer
Mr. Robert Crandall, Assistant Executive Officer
Mr. Bryan J. Smith, Supervising WRCE
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: Renewal of Waste Discharge Requirements (NPDES No. CA0082066) for Sierra Pacific Industries, Inc., Shasta County

Dear Messrs. Landau, Crandall and Smith:

The California Sportfishing Protection Alliance (CSPA) has reviewed the proposed Waste Discharge Requirements (NPDES No. CA0082066) for Sierra Pacific Industries (Permit) and respectfully 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 water quality and fisheries. CSPA members reside, boat, fish and recreate in and along waterways throughout the Central Valley, including Shasta County.

**A. The proposed Permit indicates that industrial waste discharges to surface water, the Sacramento River, have been eliminated and will not be allowed under the permit. This is contrary to several other sections of the proposed Permit.**

Specifically:

- The Facility discharges a variable (based on rainfall) quantity of industrial storm water from the southern portion of the Facility to the Sacramento River. (Fact Sheet B)

- Wastewater generated by the cogeneration operation is discharged to the Large Fire Pond at internal Discharge Point INT-001. (F-6)

- The 3.81-acre Large Fire Pond receives boiler feed water treatment system effluent from the reverse osmosis system, runoff from the chip loading area and pole log deck, ash quench water, boiler blowdown, cooling tower blowdown, and runoff from adjacent areas. (F-6)

- Water from the Large Fire Pond can also be pumped to the Small Fire Pond which can be pumped to the S.P. Ditch. (F-6)

- Under normal rainfall conditions, the entire flow in the S.P. Ditch discharges to the Retention Pond. (F-6)

- During precipitation periods, if capacity is reached in the retention pond, industrial storm water runoff from the southern portion of the Facility (planer mill, stacker, cooling shed, and drying kilns) can be discharged to the Sacramento River through Discharge Point D-002. (F-7, B.1)

In short, industrial wastewater is discharged to the large fire pond; pumped to the small fire pond; pumped to the SP ditch; which is then discharged to the retention pond. The retention pond discharges to the Sacramento River during periods of excessive rainfall. Following the trail outlined in the permit, industrial discharges are allowed to continue. The proposed Permit also allows for an extensive expansion of the Cogeneration Facility (Fact Sheet, page 8) increasing flows, which will utilize hydraulic capacity resulting to increased flows to surface waters. The proposed Permit does not contain a Discharge Prohibition disallowing industrial wastes discharges to surface water. The proposed Permit should be modified to eliminate the findings that surface water discharges of industrial waste have been eliminated or a very clear Discharge Prohibition should be added.

**B. 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.**

The proposed Permit Findings go into great detail citing the California Toxics Rule (CTR), the State's Implementation Plan (SIP) and federal regulations requiring that permits be compliant with water quality standards for priority pollutants. There is however 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 Reasonable Potential Analysis Summary, Attachment G, page G-1, only contains metals and bis 2-ethylhexyl phthalate and 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. 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 proposed Permit goes further, on page F-27, in stating for certain pollutants that: "*The Discharger has not collected samples for aluminum, iron, and manganese analysis. Therefore, the data for aluminum, iron, and manganese has been considered as discussed below, but an RP determination was not made due to the limited information*."

The proposed Permit states that: "*The Facility consists of a sawmill, planer mill, millwork, drying kilns, wood fired cogeneration boiler for generation of electrical power and steam for kiln heating, paved log unloading and scaling yard, rough cut lumber storage area, bark processing and storage area, chip loading area, log deck, pole log deck, fabrication shop, truck shop, paved finished lumber storage areas and separate pole handling facilities which include a scaling yard and log deck*." Systems such as boilers are well known for the use of corrosion inhibition chemicals and biocides. Fabrication shops and truck maintenance facilities are also well known sources of pollution. It is reasonable to assume that priority pollutants are present in the discharge. While the proposed Permit states in some areas that process waters will be discharged to land for disposal, the process waters have been discharged to surface waters in the past and there are no prohibitions against the discharge. Regardless, regulations require the discharge be fully characterized, including priority pollutants.

The US EPA established the CTR in May of 2000 (Federal Register / Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations, Environmental Protection Agency 40 CFR Part 131, Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California) which promulgates: numeric aquatic life criteria for 23 priority toxic pollutants; numeric human health criteria for 57 priority toxic pollutants; and a compliance schedule provision which authorizes the State to issue schedules of compliance for new or revised National Pollutant Discharge Elimination System permit limits based on the federal

criteria when certain conditions are met. Section *3, Implementation,* requires that once the applicable designated uses and water quality criteria for a water body are determined, under the National Pollutant Discharge Elimination System (NPDES) program discharges to the water body must be characterized and the permitting authority must determine the need for permit limits. If a discharge causes, has the reasonable potential to cause, or contributes to an excursion of a numeric or narrative water quality criteria, the permitting authority must develop permit limits as necessary to meet water quality standards. These permit limits are water quality-based effluent limitations or WQBELs. The terms ''cause,'' ''reasonable potential to cause,'' and ''contribute to'' are the terms in the NPDES regulations for conditions under which water quality based permit limits are required (See 40 CFR 122.44(d)(1)).

The SWRCB adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP) to implement the CTR. Section 1.2 Data Requirements and Adjustments, of the SIP requires that it is the discharger's responsibility to provide all data and other information requested by the RWQCB before the issuance, reissuance, or modification of a permit to the extent feasible. When implementing the provisions of this Policy, the RWQCB shall use all available, valid, relevant, representative data and information, as determined by the RWQCB.

The SIP required the Regional Boards to require dischargers to characterize their discharges for priority pollutants. On 10 September 2001, the Regional Board mailed out a California Water Code Section 13267 letter to dischargers requiring a minimum of quarterly sampling for priority pollutants, pesticides, drinking water constituents, and other pollutants. The Regional Board's 13267 letter cited SIP Section 1.2 as directing the Board to issue the letter requiring sampling sufficient to determine reasonable potential for priority pollutants and to calculate Effluent Limitations. The Regional Board's 13267 letter went beyond requiring sampling for CTR and NTR constituents and required a complete assessment for pesticides, drinking water constituents, temperature, hardness and pH and receiving water flow. 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 receiving a complete application. 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 Application Form 2A, which is required for completion of a Report of Waste Discharge for municipalities, Section B.6, requires that Dischargers whose flow is greater than 0.1 mgd, must submit sampling data for ammonia, chlorine residual, dissolved oxygen, total kjeldahl nitrogen, nitrate plus nitrite nitrogen, oil an grease, phosphorus and TDS. Federal Application Form 2A, Section D, requires that Discharger's whose flow is greater than 1.0 mgd, conduct priority pollutant sampling. 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. There is nothing in the proposed Permit that indicates that priority pollutant sampling has been completed or used in the development of the permit.

As the proposed Permit indicates, 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. 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 Discharger can reasonably collect samples from the ponds and conveyance systems where the surface water discharge would originate to characterize the discharge absent actual discharges to surface water. 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.

**C. The proposed Permit contains an Effluent Limitation for pH that does not comply with federal regulation 40 CFR 122.44 and California Water Code Section 13377.**

The Water Quality Control Plan (Basin Plan) contains a water quality objective for pH for surface waters. The Basin Plan, page III-5.00, requires that the pH shall not be depressed below 6.5 nor raised above 8.5. Such is cited in the proposed Permit at page F-33.

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 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…"

The proposed Permit, Table 6, includes appropriate Effluent Limitations for pH, except that a footnote (number 1) states that: "Except for discharges associated with a 10-year 24-hour rainfall event, or greater." The Basin Plan water quality objective does not contain any allowance for excursions below 6.5 or above 8.5. The proposed Permit does not discuss any allowance for excursions below 6.5 or above 8.5 for pH on page F-33 in the reasonable potential discussion. To the contrary, the proposed Permit (page F-33) states that "*As no mixing zone is being granted for pH, an effluent limitation of 6.5 to 8.5 is being established. Based on the Dischargers data, these limits can be achieved*."

The proposed Permit, Table 6 footnote No. 1, allows for pH excursions below 6.5 and above 8.5 during periods of rainfall events above a 10-year return frequency. The Basin Plan does not allow for any such excursions. The proposed Permit effluent limitations for pH do not comply with 40 CFR 122.44 or CWC 13377. Footnote No. 1 must be removed from the proposed Permit.

**D. The proposed Permit fails to contain mass-based effluent limits for total suspended solids (TSS), cadmium, copper, lead and zinc as required by Federal Regulations 40 CFR 122.45(b).**

The proposed Permit, Table 6, contains effluent limitations. The proposed Permit fails to contain mass-based effluent limits for total suspended solids (TSS), cadmium, copper, lead and zinc.

Federal Regulations, 40 CFR 122.45 (f), states the following with regard to mass limitations:

> "(1) All pollutants limited in permits shall have limitations, standards, or prohibitions expressed in terms of mass except:
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> (i) For pH, temperature, radiation or other pollutants which cannot be expressed by mass;
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> (ii) When applicable standards and limitations are expressed in terms of other units of measurement; or
>
> (iii) If in establishing permit limitations on a case-by-case basis under 125.3, limitations expressed in terms of mass are infeasible because the mass of the pollutant discharged cannot be related to a measure of operation (for example, discharges of TSS from certain mining operations), and permit conditions ensure that dilution will not be used as a substitute for treatment.
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> (2) 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." (emphasis added)

The proposed Permit documents that storm water is a significant portion of the surface water discharge (D-002) and that surface water discharges only occur during periods of rainfall. Rainfall prior to contact with the surface does not contain pollutants associated with the site and therefore provides dilution. The proposed Permit does not contain conditions that ensure that dilution is not used for a substitute for treatment and therefore mass limitations are required in accordance with 40 CFR 122.45(b). Furthermore, the existing Permit (R5-2004-0100) required the Discharger to begin by November 2004 accurately monitoring the flow of Discharge 002 (D-002) (i.e., by constructing, maintaining, and operating a weir or other flow measurement device), and explained that accurate monitoring of D-002 flow was necessary to develop mass-based effluent limitations. Inexplicitly, the proposed Permit requires the Discharger to only estimate D-002 flow and does not explain why more accurate flow monitoring is appropriate. Assuming the Discharger complied with flow monitoring requirement of R5-2004-0100, there should be data available to develop mass limitations in the proposed Permit.

## E. The proposed Permit contains no Effluent Limitation for bis (2-ethylhexyl) phthalate which is less stringent than the existing permit contrary to the Antibacksliding requirements of the Clean Water Act and Federal Regulations, 40 CFR 122.44 (l)(1).

Under the Clean Water Act (CWA), point source dischargers are required to obtain federal discharge (NPDES) permits and to comply with water quality based effluent limits (WQBELs) in

NPDES permits sufficient to make progress toward the achievement of water quality standards or goals. The antibacksliding and antidegradation rules clearly spell out the interest of Congress in achieving the CWA's goal of continued progress toward eliminating all pollutant discharges. Congress clearly chose an overriding environmental interest in clean water through discharge reduction, imposition of technological controls, and adoption of a rule against relaxation of limitations once they are established.

Upon permit reissuance, modification, or renewal, a discharger may seek a relaxation of permit limitations. However, according to the CWA, relaxation of a WQBEL is permissible only if the requirements of the antibacksliding rule are met. The antibacksliding regulations prohibit EPA from reissuing NPDES permits containing interim effluent limitations, standards or conditions less stringent than the final limits contained in the previous permit, with limited exceptions. These regulations also prohibit, with some exceptions, the reissuance of permits originally based on best professional judgment (BPJ) to incorporate the effluent guidelines promulgated under CWA §304(b), which would result in limits less stringent than those in the previous BPJ-based permit. Congress statutorily ratified the general prohibition against backsliding by enacting §§402(o) and 303(d)(4) under the 1987 Amendments to the CWA. The amendments preserve present pollution control levels achieved by dischargers by prohibiting the adoption of less stringent effluent limitations than those already contained in their discharge permits, except in certain narrowly defined circumstances.

When attempting to backslide from WQBELs under either the antidegradation rule or an exception to the antibacksliding rule, relaxed permit limits must not result in a violation of applicable water quality standards. The general prohibition against backsliding found in §402(o)(1) of the Act contains several exceptions. Specifically, under §402(o)(2), a permit may be renewed, reissued, or modified to contain a less stringent effluent limitation applicable to a pollutant *if*: (A) material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation; (B)(i) information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance; or (ii) the Administrator determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under subsection (a)(1)(B) of this section; (C) a less stringent effluent limitation is necessary because of events over which the permittee has no control and for which there is no reasonably available remedy [(e.g., Acts of God)]; (D) the permittee has received a permit modification under section 1311(c), 1311(g), 1311(h), 1311(i), 1311(k), 1311(n), or 1326(a) of this title; or (E) the permittee has installed the treatment facilities required to meet the effluent limitations in the previous permit, and has properly operated and maintained the facilities, but has nevertheless been unable to achieve the previous effluent limitations, in which case the limitations in the reviewed, reissued, or modified permit may reflect the level of pollutant control

actually achieved (but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, reissuance, or modification).

Even if a discharger can meet either the requirements of the antidegradation rule under §303(d)(4) or one of the statutory exceptions listed in §402(o)(2), there are still limitations as to how far a permit may be allowed to backslide. Section 402(o)(3) acts as a floor to restrict the extent to which BPJ and water quality-based permit limitations may be relaxed under the antibacksliding rule. Under this subsection, even if EPA allows a permit to backslide from its previous permit requirements, EPA may never allow the reissued permit to contain effluent limitations which are less stringent than the current effluent limitation guidelines for that pollutant, or which would cause the receiving waters to violate the applicable state water quality standard adopted under the authority of §303.49.

Federal regulations 40 CFR 122.44 (l)(1) have been adopted to implement the antibacksliding requirements of the CWA:

> (l) Reissued permits. (1) Except as provided in paragraph (l)(2) of this section when a permit is renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under Sec. 122.62.)
>
> (2) In the case of effluent limitations established on the basis of Section 402(a)(1)(B) of the CWA, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 304(b) subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.
>
> (i) Exceptions--A permit with respect to which paragraph (l)(2) of this section applies may be renewed, reissued, or modified to contain a less stringent effluent limitation applicable to a pollutant, if:
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> (A) Material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation;
>
> (B)(1) Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance; or (2) The Administrator determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b);

> (C) A less stringent effluent limitation is necessary because of events over which the permittee has no control and for which there is no reasonably available remedy;
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> (D) The permittee has received a permit modification under section 301(c), 301(g), 301(h), 301(i), 301(k), 301(n), or 316(a); or
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> (E) The permittee has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been unable to achieve the previous effluent limitations, in which case the limitations in the reviewed, reissued, or modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, reissuance, or modification).
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> (ii) Limitations. In no event may a permit with respect to which paragraph (l)(2) of this section applies be renewed, reissued, or modified to contain an effluent limitation which is less stringent than required by effluent guidelines in effect at the time the permit is renewed, reissued, or modified. In no event may such a permit to discharge into waters be renewed, issued, or modified to contain a less stringent effluent limitation if the implementation of such limitation would result in a violation of a water quality standard under section 303 applicable to such waters.

The proposed Permit, page F-40, addresses bis(2-ethylhexyl)phthalate and antibacksliding by stating that: "*The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with the exception of effluent limitations for bis-2-ethylhexylphthalate. The relaxation of effluent limitation is consistent with the anti-backsliding requirements of the CWA and federal regulations. Order No. R5-2004-0100 required that bis-2-ethylhexylphthalate be monitored at a frequency of twice per month. Order No. R5-2004-0100 had an interim MDEL of 15.6 ug/L for bis-2-ethylhexylphthalate. Detections of bis-2-ethylhexylphthalate may have been due to plastics used for sampling or analytical equipment. The discharger provided analytical results from 23 sampling events showing that bis-2-ethylhexylphthalate was not truly present in the discharge. 40 CFR 122.44(l)(2)(i)(B) allows that a permit may be reissued containing a less stringent effluent limitation for a pollutant, if information is available which was not available at the time of permit issuance and which would have justified the application of a less stringent effluent limitation at the time of permit issuance. Therefore, effluent limitations for bis-2-ethylhexylphthalate is not required in this permit.*"

The proposed Permit concludes that detections of bis(2-ethylhexyl)phthalate may have been due to plastics used for sampling or analysis equipment. The proposed Permit fails to provide any evidence that any such problems actually occurred. There is nothing in the proposed Permit, such as laboratory quality assurance and quality control (QA/QC) measures that would account

for such stated errors. CSPA's personal contact with the owners of Sierra Foothill Laboratory, a commonly used water quality compliance lab, revealed that they rarely see errors in bis(2-ethylhexyl)phthalate analyses. There is nothing in the proposed Permit showing that Regional Board staff evaluated the Discharger's facility for the presence plastic materials, which could have been the source of detectable phthalate levels.

On 30 December 2009 the US Environmental Protection Agency a press release announcing an Action Plan (a series of actions) on four chemicals raising serious health or environmental concerns, including phthalates. US EPA's Action Plan is to address the manufacturing, processing, distribution, and use of these chemicals. One of the phthalates listed is bis(2-ethylhexyl)phthalate, also commonly called di-(2-ethylhexyl)phthalate and abbreviated DEHP. Bis (2-ethylhexyl)phthalate is an organic compound and is produced on a massive scale by many companies. Phthalates were detected in greater than 75% of approximately 2,540 urinary samples collected from participants of the National Health and Nutrition Examination Survey (NHANES). Exposure in the United States to diethyl phthalate, dibutyl phthalate or diisobutylphthalate, benzyl butyl phthalate, and di-(2-ethylhexyl) phthalate is widespread.

Water quality standards for bis (2-ethylhexyl)phthalate were first established in California under the December 1992 National Toxics Rule (NTR), which was amended in 1999. On 18 May 2000, US EPA adopted the California Toxics Rule (CTR). The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. Despite the current regulation under the CTR, US EPA has revised their recommended Ambient Criteria for bis (2-ethylhexyl) phthalate to a significantly lower number. This new lower criteria for bis (2-ethylhexyl) phthalate would result in more wastewater discharges being regulated to keep this plasticizer out of California's waterways.

EPA's existing regulation of bis(2-ethylhexyl)phthalate is based on human consumption of water and fish. EPA has also issued new information regarding the impacts to aquatic life: "Of the 8 phthalates, BBP, DEHP, and DBP elicit the most toxicity to terrestrial organisms, fish, and aquatic invertebrates (EC, 2008a; Staples et al. 1997). Ecotoxicity studies with these phthalates showed adverse effects to aquatic organisms with a broad range of endpoints and at concentrations that coincide with measured environmental concentrations. Toxic effects were observed at environmentally relevant exposures in the low ng/L to _g/L range (Oehlmann et al. 2008)."

US EPA has delegated authority to the State of California to issue NPDES permits to regulate wastewater discharges to surface waters. In regulating wastewater discharges in California, the state must comply with Federal Regulations. US EPA interprets one of their principal regulations (40 CFR 122.44(d)), in *Central Tenets of the National Pollutant Discharge Elimination System (NPDES) Permitting Program*, to mean that although States will likely have unique implementation policies, there are certain tenets that may not be waived by State

procedures. These tenets include that "where valid, reliable, and representative effluent data or instream background data are available they MUST be used in applicable reasonable potential and limits derivation calculations. Data may not be arbitrarily discarded or ignored." In short, Federal Regulations require that if a wastewater discharge presents a reasonable potential to exceed a water quality standard, a numeric Effluent Limitation must be established in the NPDES permit. (Emphasis added)

The following web site shows that the Regional Board has taken numerous enforcement actions against this and/or similar Sierra Pacific facilities for bis (2-ethylhexyl) phthalate: http://www.sierraforestlegacy.org/Resources/Conservation/FederalLegislative/Testimony/Attach11_SPI_CVRWCB_Violations.pdf.

The weight of the evidence indicates the sampling used to find that there is a reasonable potential for the discharge to contain bis (2-ethylhexyl) phthalate at problematic concentrations in the last NPDES permit is valid absent firm scientific evidence to the contrary. The Regional Board has not presented any scientific evidence but merely guesses that the previous sampling may have been in error. The Regional Board's guesses do not meet the regulatory test to allow permit backsliding.

**F. The proposed Permit fails include a reasonable potential analysis and contain an Effluent Limitation for turbidity in accordance with 40 CFR 122.44.**

The proposed Permit, Table F-2, shows the discharge levels of turbidity as high as 234 NTU.

The proposed Permit contains Receiving Water Limitations based on the Basin Plan Water Quality Objective for Turbidity stating that:

> Waters shall be free in turbidity that cause nuisance or adversely affect beneficial uses. Increases in turbidity attributed to controllable water quality factors shall not exceed the following limits:
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> > Shall not exceed 2 Nephelometric turbidity Unit (NTU) where natural turbidity is less than 1 NTU;
> >
> > Shall not increase more than 1 NTU where natural turbidity is between 1 and 5 NTUs;
> >
> > Shall not increase more than 20 percent where natural turbidity is between 5 and 50 NTUs;
> >
> > Shall not increase by more than 10 NTU where natural turbidity is between 50 and 100 NTUs;

> Shall not increase by more than 10 percent where natural turbidity is greater than 100 NTUs.

The Sacramento River in Shasta County has fairly low turbidity.

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.

A Receiving Water Limitation is not an Effluent Limitation as is required by 40 CFR 122.44. At a minimum, the proposed Permit must be amended to include a reasonable potential analysis for turbidity and an Effluent Limitation if appropriate.

**G. 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 Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP).**

The proposed Permit, 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." The SIP is a state *Policy* and 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.

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. There has been no argument that domestic

sewage contains toxic substances and presents a reasonable potential to cause toxicity if not properly treated and discharged. 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 Proposed 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.

Proposed Permit is quite simply wrong; by failing to include effluent limitations prohibiting chronic toxicity the proposed Permit does not "…implement the SIP". The Regional Board has commented time and again that no chronic toxicity effluent limitations are being included in NPDES permits until the State Board adopts a numeric limitation. The Regional Board explanation does not excuse the proposed Permit's failure to comply with Federal Regulations, the SIP, the Basin Plan and the CWC. The Regional Board's Basin Plan, as cited above, already states that: "…waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses…." Accordingly, the proposed Permit must be revised to prohibit chronic toxicity (mortality and adverse sublethal impacts to aquatic life, (sublethal toxic impacts are clearly defined in EPA's toxicity guidance manuals)) in accordance with Federal regulations, at 40 CFR 122.44 (d)(1)(i) and the Basin Plan and the SIP.

**H. The proposed Permit is inadequate because it does not: (a) characterize the quality and quantity of wastes discharged to land, (b) characterize underlying groundwater, and (c) present convincing technical information demonstrating that the discharge to land is exempt from the containment requirements of Title 27 and is consistent with antidegradation provisions of State Water Board Resolution 68-16.**

The proposed Permit, like the current Permit (Order R5-2004-0100) does not adequately characterize the discharge of waste to land at the Facility. However, the current Permit's Finding 6 does identify several chemicals in the land discharge (e.g., sodium chloride, sodium hydroxide, water-soluble polymer, anhydrous ammonia, potassium hydroxide, sodium metabisulfite, diethyl amino ethanol, cyclohexyl amine, morpholine, sodium nitrite, sodium borate, and sodium hypochlorite). Inexplicitly, the current Permit does not even require the Discharger to monitor the land discharge for flow and quality.

The proposed Permit's Attachment A (TOPOGRAPHIC MAPS) is based on an USGS Topographic Map Photorevised in 1965. The attachment shows several large ponds at the Facility that presumably have been in existence since at least 1965. The Discharger has had several decades to collect and compile data to characterize the Facility's discharge of waste constituents to land; characterize underlying groundwater upgradient and downgradient of the Facility; and evaluate the extent to which the discharge has degraded groundwater.

The proposed Permit does provide some information on waste characterization. It indicates that the Discharger collected samples from the cogeneration discharge, the sawmill discharges, the network of ponds, and an upgradient well, and states that "sample results, and the calculations and analysis by the Discharger demonstrate that groundwater impacts are and will be insignificant, and do not and will not result in the exceedance of any water quality objectives." It is not acceptable for the proposed Permit to simply state the Discharger has concluded that the risk to groundwater posed by its land discharge is insignificant and therefore the discharge is exempt from Title 27 and is consistent with Resolution 68-16. The Discharger has an obvious financial incentive to make this conclusion.

The current Permit, like the proposed Permit, is similar to many other Central Valley Region NPDES permits that, in addition to authorizing discharges of pollutants to waters of the U.S., also authorize significant discharges of waste to land without fully addressing or implementing state requirements for the land discharge. This is particularly troublesome for the proposed Permit, which indicates the Discharger plans to cease its reliance on surface water discharge altogether and rely solely on land discharge for waste disposal. If the Regional Board were to adopt the proposed Permit as is, it is likely that, once the Discharger demonstrated that it no longer required authorization to discharge to the Sacramento River, staff would simply process a special order for Regional Board consideration that would rescind the NPDES sections of the Permit but continue to allow an expanded land discharge without properly evaluating this discharge or ensuring that relevant CEQA requirements were met.

The proposed Permit must provide the necessary technical data to support its conclusion that the land discharge is exempt from Title 27 and is consistent with Resolution 68-16. However, it is not possible to do this without characterizing underlying groundwater and the land discharge. Indeed, the proposed Permit's requirement for groundwater monitoring appears to conflict with its stated certainty that the discharge to land poses no significant threat to groundwater.

In drafting the proposed Permit, staff should have evaluated discharge and groundwater monitoring data of other sawmill facilities owned and operated by the Discharger in the Central Valley Region (e.g., in Tuolumne County). Had staff done so, staff would have determined, for example, that the water used over and over to moisten logs is characterized by very high salt

concentrations because of evaporative losses and that the impoundment of this highly saline waste in an unlined pond, which the proposed Permit allows, degrades high quality groundwater. Also, staff would have determined that the discharge of organic waste constituents (e.g., tannins and lignins) to the Facility's unlined ponds threaten to cause anaerobic conditions in the soil and groundwater. Anaerobic conditions can mobilize soil constituents such as iron, manganese, and arsenic, which, absent sufficient attenuation in the soil profile, can be released to groundwater in concentrations exceeding applicable water quality objectives.

If the proposed Permit is designed to authorize waste discharges to land, it must, like any other WDR Program waste discharge requirements order, do the following:

1. Characterize all authorized discharges of wastes to land – namely, all discharges to the Facility's unlined surface impoundments (i.e., 3.8-acre Large Fire Pond, 0.53-acre Small Fire Pond, 0.88-acre Log Deck Recycle Pond, 9.90-acre Retention Pond, and the S.P. Ditch), as well as discharges of waste constituents to soils in areas used to store materials (e.g., the bark storage area);

2. Characterize underlying groundwater potentially affected by the discharge for depth, gradient, and quality; and

3. Include sufficient technical information demonstrating the discharge to land:

    a. Does not cause underlying groundwater to contain waste constituents in concentrations exceeding applicable water quality objectives,

    b. Reflects the implementation of best practicable treatment or control (BPTC) to minimize degradation of high quality groundwater, and

    c. Minimizes degradation to a level consistent with maximum public benefit.

The current Permit establishes Groundwater Limitations that allow no degradation of background groundwater (i.e., "The discharge, in combination with other sources, shall not cause usable groundwater underlying the facility to contain waste constituents statistically greater than background water quality.") In contrast, the proposed Permit establishes Groundwater Limitations that allow the Discharger to degrade groundwater up to water quality objectives even though it provides no technical justification that the land discharge is exempt from Title 27 and is consistent with Resolution 68-16. Until the Discharger demonstrates, and the proposed Permit documents, that the land discharge is exempt from Title 27 and is consistent with Resolution 68-16, the proposed Permit should carry over the current Permit's Groundwater Limitations of no degradation, and the proposed Permit should include a specification that requires all discharges of waste to land be done in a manner that does not threaten to cause exceedances of Groundwater Limitations. Additionally the groundwater monitoring requirements should require

quarterly monitoring throughout the Permit's duration to provide the necessary data to evaluate the discharge's ongoing impact to groundwater, and include total organic carbon in the suite of monitored constituents to provide necessary data on the extent to which the discharge has overloaded groundwater with organic constituents.

Alternatively, the proposed Permit should limit its authorization to the discharge of industrial storm water to the Sacramento River and staff should direct the Discharger to submit a complete Report of Waste Discharge pursuant to CWC Section 13260 for its discharges of waste to land and submit documentation demonstrating the land discharge is compliant with CEQA. Following the Discharger's submittal of the Report of Waste Discharge, staff should draft a WDR Program waste discharge requirements order for Regional Board consideration that addresses only the land discharges at the Facility.

**I. The proposed Permit is inadequate because it does not include an adequate process flow diagram and technical information about the Discharger's water balance.**

The proposed Permit's Attachment C only presents the Facility's storm water flow schematic. It should include another attachment depicting a process flow schematic for all the waste streams involved in the land discharge. This schematic should not only identify the various sawmill operations that generate waste, but also identify the various flows of the waste streams. Also, the proposed Permit should include a discussion on the Discharger's water balance, presumably included in its Report of Waste Discharge. This is particularly necessary because the Discharger will be increasing its land discharge flows once it starts up it new cogeneration plans.

**J. The proposed 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 proposed Permit, page F-8 states that:

> **"2. Addition of New Cogeneration Power Plant.**
> The Discharger is in the process of adding a new cogeneration power facility, including a new fuel shed, boiler building, turbine building, cooling tower, electrostatic precipitator, ash silo and electric substation at the Facility. The boiler would burn biomass fuel to produce steam to dry lumber in existing kilns and to power a steam turbine. The steam turbine would drive a generator that would produce up to 31 MW of electricity. The new cooling tower would produce an additional 60 to 110 gallons per minute (gpm) of cooling water blowdown discharged to the onsite ponds (a maximum of 156 acre-feet per year). This is an increase between 233 percent and 275 percent over the current cogeneration

> process discharge. Boiler blowdown will increase between 0.8 and 3.5 gpm. This increased process water discharge is permitted by this Order."

The proposed Permit allows for a significant increase in wastewater flow. The proposed Permit Fact Sheet contains only unsupported conclusory statements regarding an Antidegradation Analysis. 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.

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 Regional Board is 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 (State Water Resources Control Board, Water Quality Order 86-17, p. 20 (1986) ("Order 86-17); Memorandum from Chief Counsel William Attwater, SWRCB to Regional Board Executive Officers, "federal Antidegradation Policy," pp. 2, 18 (Oct. 7, 1987) ("State Antidegradation Guidance")). As a state policy, with inclusion in the Water Quality Control Plan (Basin Plan), 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/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. 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. 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.

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 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.

There is nothing resembling an analysis buttressing the unsupported claim that BPTC is being provided. Lining the ponds to eliminate the percolation of pollutants to groundwater while eliminating surface water discharges would eliminate threatened degradation but was not evaluated.

There is nothing in the Permit resembling an analysis that ensures that existing beneficial uses are protected. While the Permit identifies the constituents that are included on the 303(d) list as impairing 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 Permit 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.

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 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 antidegradation analysis in the proposed Permit is not simply deficient, it is nonexistent. The brief discussion of antidegradation requirements, in the Findings and Fact Sheet, consist only of skeletal, unsupported, undocumented conclusory statements totally lacking in factual analysis. NPDES permits must include any more stringent effluent limitation necessary to implement the Regional Board Basin Plan (Water Code 13377). The Tentative Permit fails to properly implement the Basin Plan's Antidegradation Policy.

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

Sincerely,

Bill Jennings, Executive Director
California Sportfishing Protection Alliance