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5 January 2009

Mr. Ken Landau, Assistant Executive Officer
Mr. Jim Marshall, Senior WRCE
Ms. Mary E. Serra, P.E.
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: Tentative Waste Discharge Requirements for Amador Water Agency, Pine Grove Community Leachfield System, Amador County

Dear Messrs. Landau, Marshall and Ms. Serra,

The California Sportfishing Protection Alliance (CSPA) has reviewed the proposed Waste Discharge Requirements (NPDES No. CA0081787) for Amador Water Agency, Pine Grove Community Leachfield System (Permit) 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 water quality and fisheries. CSPA members reside, boat, fish and recreate in and along waterways throughout the Central Valley, including Amador County.

Surface water drainage from the Pine Grove leachfield is to Jackson Creek, a tributary to Dry Creek, thence to the Mokelumne River. Jackson Creek has been shown by sampling to be significantly impacted by high coliform concentrations that have degraded beneficial uses. The City of Jackson has studied these high coliform concentrations and attributed the causes to upstream residential septic systems. In addition to surface flows, there is potential for polluted groundwater to migrate from the leachfield to Jackson Creek.

1. **The proposed WDR fails to prohibit the discharge of unpolluted water such as stormwater to the system and should be revised to require the Discharger to conduct a Water Conservation Program in order to extend the life of the system and ensure compliance with the flow limitation as basic source control measure.**

Hydraulic loading is a significant problem for small community septic systems. Leaking plumbing fixtures or wasteful water practices can have a significant impact on the system and can result in the failure of the system including surfacing of wastewater. For example, leaking fixtures such as but not limited to leaking faucets and running toilets in 8-10 homes can use as much as 15 gpm which would exceed the capacity of Phase 1 leachfield. Water conservation programs have been successfully implemented throughout the Central Valley. The Basin Plan encourages water conservation and recycling practices. In order to ensure compliance with flow limits and to extend the life of the system the proposed WDR must be revised to include a water conservation program to show basic source control.

2. The proposed WDR must be revised to require the Discharger to conduct public education and outreach programs in order to comply with Prohibition No. 2 which states "Discharge of waste classified as "hazardous" under Title 23 CCR Chapter 15, Section 2521, or "designated," as defined in Section 13173 of CWC is prohibited, and must have some basic source control measures in place.

A septic system may be well suited to breakdown human excrement if it is well designed, properly used and is properly maintained. However, there are many potential problems with septic tanks. One of which is that people put a lot more than human waste down their drains. Even simple food items such as too much grease, cooking oil or fat may greatly reduce the efficiency of the system. Household cleaners, paints, paint thinners (solvents) and other toxic including chemicals pesticides and herbicides are not only toxic to the bacteria which make the system operate properly, these chemicals may cause pollution of the underlying groundwater.

The Discharger must inform the public residents that discharging paints, solvents, pesticides, herbicides and hazardous chemicals is not acceptable. The Discharger can easily include educational letters with the monthly billing invoices and the Discharger can help coordinate the hazardous waste collection events for the community with the Certified Uniform Program Agency, i.e. Amador County.

With regard to excessive grease, the proposed WDR must require the Discharge to develop a sewer ordinance for grease and other commercial discharges that may impact the sewer system. It is well known the oil/grease is responsible for sewer blockages and can account for a substantial loading to the treatment plant, particularly in small community systems. Generally oil/grease is derived from used cooking oil and waste greases that are separated and collected at the point of use by the food service establishment.

According to the US EPA National Pretreatment Publication, the annual production of collected grease trap waste and uncollected grease entering sewage treatment plants can be significant and ranges from 800 to 17,000 pounds/year per restaurant.

Food service establishments can adopt a variety of best management practices or install interceptor/collector devices to control and capture the oil/grease material before discharge to the collection system. For example, instead of discharging grease to the sewer, food service establishments usually accumulate this material for pick up by consolidation service companies for re-sale or re-use in the manufacture of tallow, animal feed supplements, bio-fuels, or other

products such as is done by the Sacramento Rendering Company. Food service establishments should be required to install interceptor/collector devices (e.g., grease traps) in order to accumulate grease on-site and prevent it from entering the collection system.

3. The proposed WDR must be revised to require the Discharger must develop a sewer ordinance that clearly prohibits the discharge of pollutants that may impact the treatment system.

Without a basic sewer ordinance there is no basis for source control since all waste discharges are acceptable. At a minimum a sewer ordinance should contain the following requirements:

A. GENERAL PROHIBITION (from 40 CFR 403): A User may not introduce into a sewer any pollutant(s) which cause Pass Through or Interference. These general prohibitions and the specific prohibitions in "D" below apply to each User introducing pollutants into a POTW whether or not the User is subject to other National Pretreatment Standards or any National, State, or Local Pretreatment Requirements.

B. PROHIBITION AGAINST DILUTION: No Industrial/commercial user shall ever increase the use of process water, or in any other way attempt to dilute as a partial or complete substitute for adequate treatment to achieve compliance with a Pretreatment Standard or Requirement.

C. PROHIBITION AGAINST BYPASS: Bypass of wastewater pretreatment is prohibited, and the Agency may take enforcement action against an user for a bypass, unless the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; there were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime; and the industrial user submitted notices in compliance with the Standard Conditions of this permit.

D. SPECIFIC PROHIBITIONS: A Sewer User may not introduce the following discharges into the Sewerage System:

1. **Flammable or Explosive Substances:** Pollutants which create a fire or explosion hazard in the wastewater collection system or treatment plant, including but not limited to, waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit (60 degrees Centigrade) using the test methods specified in 40 CFR 261.21;

2. **Corrosives:** Pollutants which will cause corrosive structural damage to the POTW, but in no case Discharges with pH lower than 5.0 unless a specific variance is granted;

3. **Hazardous Wastes:** Hazardous wastes, as defined in California Administrative Code, Title 22, Section 66261.3;

4. **Trucked Pollutants:** Any trucked or hauled pollutants except at discharge points designated by the POTW;

5. **Toxic and Poisonous Substances:** Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;

6. **Substances which may obstruct flow:** Solid or viscous substances in amounts which will cause obstruction to flow in the sewer resulting in Interference;

7. **Odorous Wastes:** Strongly odorous wastes or wastes tending to evolve strong odors;

8. **Uncontaminated Water:** Uncontaminated ground, storm, and surface waters, and roof runoff;

9. **Pretreatment Sludges:** Sludges or deposited solids resulting from an industrial or pretreatment process;

10. **Heat:** Heated waste streams having a temperature that is equal to or greater than one hundred and fifty (150) degrees Fahrenheit or sixty-five (65) degrees Centigrade;

11. **Radioactive Wastes:** Radioactive wastes or isotopes of such half-life or concentrations as may exceed limits established in the "Code of Federal Regulations" at 10 CFR 20, Subpart K, and;

12. **Grease and Oils:** Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.

4. The proposed WDR inappropriately relies on the Tulare Lake Basin Plan's in order to set groundwater limitations. Therefore, proposed WDR Finding No. 51(a) most be removed and Groundwater Limitations revised:

The proposed WDR Finding No. 51(a) states: "The TDS of the effluent currently averages approximately 357 mg/l in 2007, which is consistent with the Tulare Lake Basin Plan's established effluent limit of 350 mg/l over the source water TDS of 41 mg/l. Circumstances and conditions with respect to treatment and control of salinity in the Sacramento-San Joaquin River Basin are similar to those of the Tulare Lake Basin. Therefore, the discharge will likely not impair the beneficial uses of groundwater due to increased salinity. Based on best professional judgment, an incremental increase of 350 mg/l over the source is BPTC for the effluent "

There is no evidence in the record to support the Finding that 350 mg/L TDS over background is BPTC. To the contrary, the Discharger's BPTC analysis has not even been conducted and therefore, there is no foundation for this Finding. Finding Nos. 34, 35, and 36 suggest that the

system is already impacting the groundwater with TDS, nitrates and total coliform organisms. Moreover, the Regional Board's implementation of the Tulare Basin Plan in this proposed WDR which is actually covered by the Sacramento Basin Plan is a form of under ground regulations as is simply illegal.

The Regional Board has not considered additional treatment technologies for the system that are readily available on the market and are widely used throughout the nation. For example, urea, ammonia, nitrites nitrates in the wastewater will contribute to the TDS loading. It is common for single family homes to use filtration and recirculation to nitrify and denitrify the wastewater as treatment to remove these waste constituents prior to disposal. In fact numerous homes in the surrounding counties have installed such treatment devices. In addition, aeration and filtration are known also reduces total coliform organisms and help prevent fouling of the leachfield. Since a single family resident can utilize improved treatment for septic tank systems in the surrounding communities' then additional treatment such as but not limited to filtration, aeration, filtration and recirculation are BPTC. It appears that the Regional Board not required the Discharger to implement BPTC for this community septic system. These treatment systems have been used throughout the country for decades successfully. There are numerous manufactured treatment systems for septic system wastes on the market that can be purchased on a turnkey basis. Since the use proven technologies to reduce waste constituents for septic system is more protective of the groundwater and that the technology is readily available commercially at affordable prices then it could be considered is BPTC. Furthermore, disinfection of effluent is done by hundreds of treatment plants and the degradation of the groundwater due to total coliform organisms is not BPTC.

To often the Regional Board has accepted septic tank systems at communities in which the Developer has been allowed to locate the leachfield on the worst piece of property, which is usually deemed not suitable for building. The communities are then stuck with an inefficient septic system that degrades the groundwater. We note that the proposed WDR fails to consider additional locations for the leachfields that are not located on steep slopes with shallow soils.

The proposed WDR simply does not comply with the antidegradation policy No. 68-16.

5. The proposed WDR authorizes the expansion of the WWTP without first conducting an antidegradation analysis. The Discharger must first complete and submit an antidegradation analysis before the Regional Board may consider the proposed WDR for adoption which expands the discharge.

Finding No. 50 states "Degradation of groundwater by some of the typical waste constituents released with discharge from a municipal wastewater utility after effective source control, treatment, and control is consistent with maximum benefit to the people of the State. The technology, energy, water recycling, and waste management advantages of municipal utility service far exceed any benefits derived from a community otherwise reliant on numerous concentrated individual wastewater systems, and the impact on water quality will be substantially less. Economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State, and therefore sufficient reason to accommodate growth and groundwater degradation provided terms of the Basin Plan are met".

Degradation is only permissible for "municipal wastewater utility after effective source control, treatment, and control if the discharge is in compliance with the Basin Plan. The proposed WDR as detailed in this letter has not required source control or treatment and control to reduce TDS, nitrogen compounds and total coliform organisms. The record shows that the total coliform organism concentration in the groundwater has already exceeded the Basin Plan objective and therefore, the discharge is not in compliance with the Basin Plan. Finding No. 52 states in part, "There is not sufficient data at this time to determine whether unreasonable groundwater degradation has, or likely will, result from the discharge. If there is not enough information to determine if degradation has occurred and to show that the Basin Plan groundwater objective is met, then there is also insufficient information in the record to demonstrate that the discharge has complied with Policy No. 68-16.

Compliance with CCR Title 27 will prevent any degradation to the groundwater. While the proposed WDR states that the discharge is exempt from Title 27, the Regional Board must first show compliance with Basin Plan objectives, requirements and incorporated Policies; otherwise an exemption is not allowable. The record shows that the Basin Plan total coliform organism objective has not been met and groundwater degradation has occurred. There is no foundation for the granted exemption in the record. If the Regional Board "does not know" if the Basin Plan objectives are being met (see Finding No. 52) then there is no evidence to justify the Title 27 exemption. The Discharger can install filtration and/or disinfection equipment so that total coliform organisms are reduced or eliminated, which is actually what hundreds of other POTWs have done.

6. Monitoring Reporting Program must be revised to include field for the observations receiving water. In addition, monthly monitoring must be conducted.

Cited algal growth, black slime, may be the result of nutrient loads to the stream and therefore, field observations for the receiving water must be made when samples are collected. In addition, quarterly monitoring is insufficient and is not protective of surface waters. The proposed WDR fails to discuss the surface water problems known to exist downstream of the site. The Discharger should conduct monthly monitoring of the receiving waters for pH, EC, temperature, and dissolved oxygen. The monitoring can be achieved with a single YSI meter easily used by the Discharger to collect the required data.

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