

Central Valley Regional Water Quality Control Board  
5/6 February 2009 Board Meeting

Response to Comments for the  
Amador Water Agency, Pine Grove Community Leachfield System  
Tentative Waste Discharge Requirements  
Revised 11 January 2009

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The following are California Regional Water Quality Control Board, Central Valley Region (Regional Board) staff responses to comments submitted by interested parties regarding the tentative Waste Discharge Requirements (revised WDR Permit, WDRs) for the Pine Grove Community Leachfield System (CLS). Public comments regarding the proposed Order were required to be submitted to the Regional Water Board by 9:00 a.m. on 12 January 2009 in order to receive full consideration.

The Regional Board received comments regarding the proposed revised WDR Permit by the due date from the Amador Water Agency (AWA) and the California Sportfishing Protection Alliance (CSPA). The submitted comments were accepted into the record, and are summarized below, followed by Regional Board staff responses.

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**AMADOR WATER AGENCY**

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**General Discharger Comments** - The Discharger requested several minor and non-substantive wording changes in its comment letter. Changes have been accepted and incorporated into the proposed WDRs.

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**CALIFORNIA SPORTFISHING PROTECTION ALLIANCE COMMENTS**

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**Designated Party Status.** CSPA requested designated party status for the board hearing scheduled for 5/6 February 2009 with regard to the WDRs for the AWA and the CLS. The commenter will be granted designated party status for the subject hearing.

**General response to CSPA** - CSPA within its comment document makes various assertions that Regional Water staff find questionable, such as “[i]t is common for single family homes to use filtration and recirculation to nitrify and denitrify the wastewater as treatment.” In addition, vague and unclear sentences make it difficult to successfully demonstrate either partial agreement or an opposing view.

**Comment A NPDES No. CA0081787** - 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.

**RESPONSE:** The Order is for a revised WDR permit. The facility is not an NPDES facility and the number cited is not assigned to the AWA.

**Comment B Jackson Creek coliform concentrations** - 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.

**RESPONSE:** The wastewater is discharged to leachfield not into Jackson Creek, thus, the receiving water is groundwater. Due to the location of the leachfield and its proximity to Jackson Creek, the WDRs require surface water monitoring, including TDS, Nitrate as N, and Chloride at three stations: S1, S2 and S3. S1 is about 100 feet upstream of leachfield system, S3 is about 100 feet downstream of leachfield system and S2 monitors the surface water in about the middle of the leachfield system. The Regional Board staff analyzed the June 2004 through September 2008 monitoring data and graphed the data within the figures below <sup>1</sup>. Figures 1 through 3 show the trend of TDS, nitrate as N and Chloride. If the discharge degraded the surface water, the monitoring data of S3 should have the highest value, but the data does not support this assertion. Based on the available monitoring data, we can not conclude that the discharge degraded the surface water. However, in order to evaluate any impact the CLS may have on surface water coliform concentrations, additional monitoring has been added to the proposed WDRs.

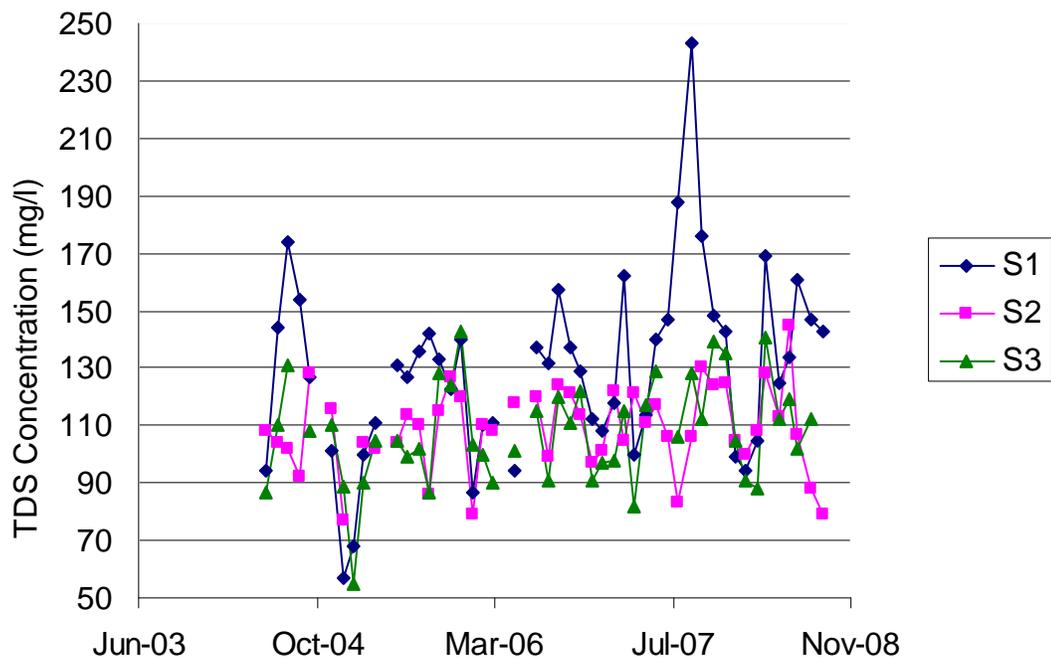


Figure 1 - Pine Grove Surface Water Monitoring-TDS

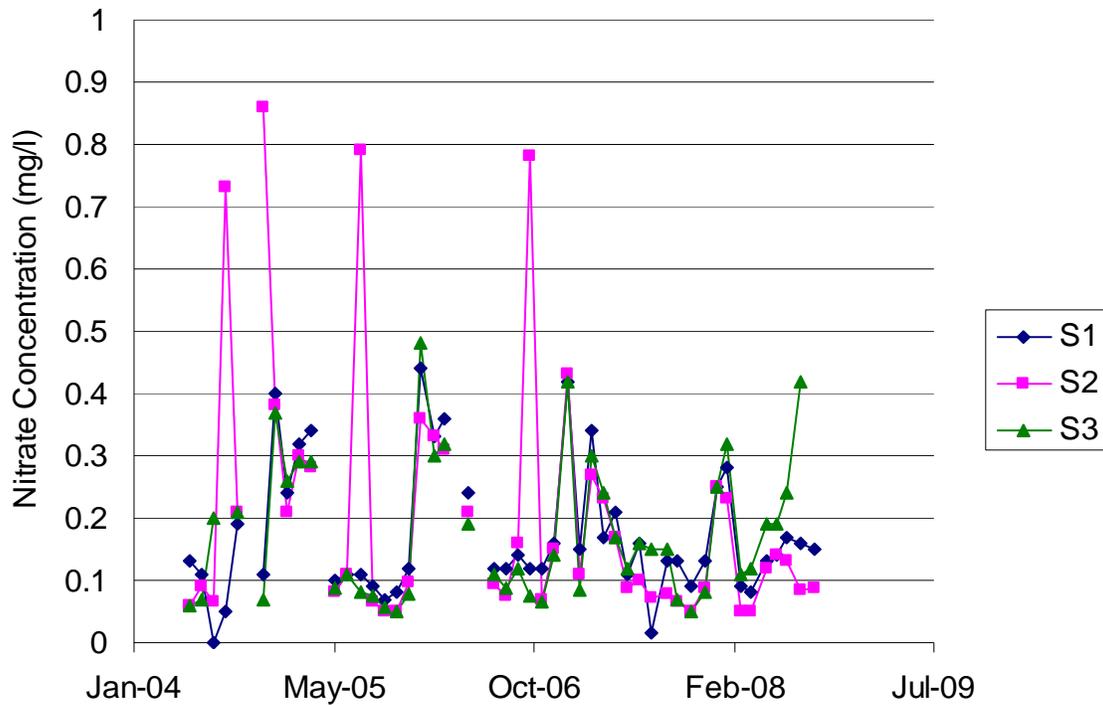


Figure 2 - Pine Grove Surface Water Monitoring-Nitrate as N

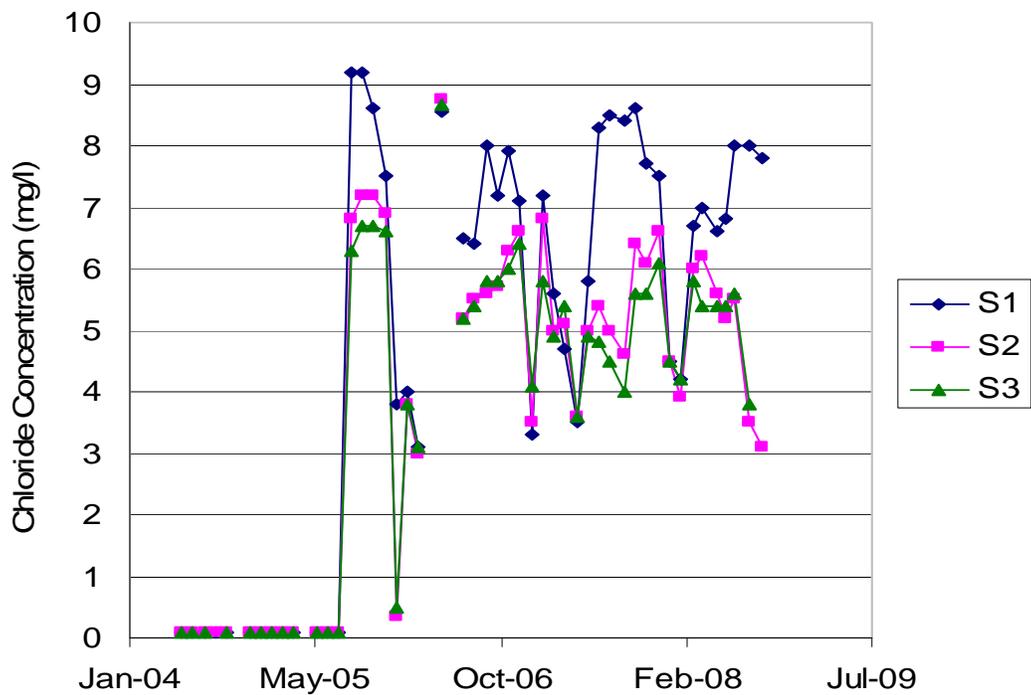


Figure 3 - Pine Grove Surface Water Monitoring -Chloride

<sup>1</sup>The leachfield began operation in April 2001, and the surface monitoring began in June 2004. Sampling problems leading to outlying data for TDS has not been included in the figure.

**Comment No. 1 Stormwater disposal and water use conservation** - 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.

**RESPONSE:** Provision 11 of the proposed WDRs addresses the issue of the discharge of pollutant-free water including stormwater into the leachfield system. In addition, the Discharger has designed anti-leakage and infiltration and inflow (I/I) prevention BMPs into its wastewater collection system, including a dual compartment water tight septic tank, small diameter tight-line collection system without manholes and stormwater diversion features on the leachfield. Conservation measures are included in the AWA regulations, and its Operation and Maintenance Manual for the CLS. The AWA has a conservation program and it is available on website: <http://www.amadorwa.com/conservation.htm>. It should be noted that the water supply for the Pine Grove residents is provided by the Pine Grove Community Service District.

**Comment No. 2 Public Education** - 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.

**RESPONSE:** The AWA’s Wastewater Regulations, Rate & Rules contains discussions of the limitations of the use of the sewer, toxic substances and the installation of interceptors including grease traps and already conducts regular public outreach to educate its customers with regard to its rules.

**Comment No. 3 Sewer Ordinance** - The proposed WDR must be revised to require the Discharger must (sic) develop a sewer ordinance that clearly prohibits the discharge of pollutants that may impact the treatment system.

**RESPONSE:** The AWA is not a municipality and thus the adoption and enforcement of an ordinance is inappropriate. The AWA’s Wastewater Regulations, Rate & Rules contains discussions of liquid waste disposal, pretreatment plan requirements, temperature requirements, limitations of the use of the sewer, toxic substances and the installation of interceptors including grease traps.

**Comment No. 4 Tulare Lake Basin Plan** - 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 (sic) 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 (sic) 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 (sic) 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.

**RESPONSE:** The proposed WDRs acknowledge that the community of Pine Grove and the CLS are within the bounded area for which the applicable water quality control plan is *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition.

The WDRs do not rely on Tulare Lake Basin Plan to set groundwater limitations. The groundwater limitations for the proposed WDRs are exactly the same as those contained in the existing WDRs for the Pine Grove community Leachfield System R5-2004-0036, adopted 19 March 2004. The methodology that is contained in the Tulare Lake Basin Plan was used to provide a numerical effluent limitation for total dissolved solids within the proposed WDRs. The Regional Board calls your attention to the distinction between the quality of source water and background groundwater quality, and correspondingly the development and identification of effluent limits and groundwater limits, the comment confuses the two.

Further, the effluent limitation is applied at the dosing tank which is part of the treatment system prior to the wastewater discharge and the additional treatment that occurs via infiltration through the soil column. The use of this methodology is not an underground regulation; rather it is a determination of a numerical limit on a case-by-case evaluation of a narrative objective.

**Comment No. 5 Antidegradation** - 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.

**RESPONSE:** The Discharger included the antidegradation analysis in its RWD.

**Comment No. 6. Surface water monitoring** - Monitoring Reporting Program must be revised to include field for the (sic) observations receiving water. In addition, monthly monitoring must be conducted.

**RESPONSE:** The receiving water for this discharge is groundwater and not surface water. The monitoring data (Figure 1 through 3) demonstrate the discharge has not degraded the surface water. Therefore, the monitoring of surface water as stated in the proposed Order is appropriate and reasonable.