

ITEM: 10

SUBJECT: County of Nevada Sanitation District No.1, Cascade Shores Wastewater Treatment Plant, Nevada County

BOARD ACTION: *Consideration of a Cease and Desist Order.*

BACKGROUND: The Discharger owns and operates the Cascade Shores Wastewater Treatment Plant (WWTP) and the accompanying collection system, which provide sewerage service to the Cascade Shores Community. Treated municipal wastewater is discharged to Gas Canyon Creek, a water of the United States, and tributary to Green Horn Creek, Rollins Reservoir, and the Bear River.

The Discharger has violated Waste Discharge Requirements (WDRs) Order No. 5-01-177 by failing to install chlorine monitoring equipment, and by bypassing the WWTP's filtration system, which has resulted in effluent violations for chlorine residual, total coliform organisms and total suspended solids. WDRs Order No. 5-01-177 included time schedules for completing improvements necessary to comply with effluent limits and discharge requirements by 16 June 2006.

On 9 May 2005, a landslide took place on a cliff overhanging the Cascade Shores WWTP, resulting in the displacement of the main influent pipeline to the plant, and the discharge of raw sewage to Gas Canyon Creek. The WWTP is situated at the base of the cliff and continued landslides threaten to impair the ability of the WWTP to treat waste. The Discharger has completed temporary repairs to the sewer line but has not stabilized the hillside or undertaken other measures, such as relocating the package treatment plant, to prevent the WWTP from again being disabled. The instability of the cliff and potential for continued landslides, and location of the WWTP, pose a significant threat to the continued ability of the WWTP to treat wastes. Thereby threatening to violate waste discharge requirements.

On 15 September 2005, Nevada County Sanitation District No. 1 informed the Regional Water Board that improvements to the WWTP required by WDRs Order No. 5-01-177 have been, in part, delayed by the landslide at the WWTP. In addition, the Discharger decided to relocate the WWTP away from the hillside in order to prevent future impacts from landslides to the WWTP. The Discharger has requested additional time to complete the improvements and to relocate the WWTP.

The proposed Cease and Desist Order (CDO) includes time schedules for facility improvements to meet the effluent limit for ammonia, to comply with Monitoring and Reporting Program No. 5-01-177, and requires installation of chlorine, pH, and turbidity monitoring devices. The CDO requires the Discharger to cease bypassing of the WWTP filtration process

and extends the time schedule allowing the Discharger to complete improvements and relocate the WWTP.

ISSUES:

1. The CDO does not exempt the Discharger from mandatory minimum penalties for effluent violations occurring at the WWTP. The Discharger requests that the compliance deadline for Effluent Limitations B.1.B be deferred until after the WWTP improvements have been completed.

California Water Code (CWC) section 13385(h) and (i) require the Regional Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. CWC section 13385(j) exempts certain violations from the mandatory minimum penalties. CWC section 13385(j)(3) exempts the discharge from mandatory minimum penalties “*where the waste discharge is in compliance with either a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300, if all the [specified] requirements are met. ... For the purposes of this subdivision, the time schedule may not exceed five years in length...*” The time schedule for ammonia, nitrate, turbidity and 7-day median total coliform organisms effluent limitations subject to this CDO were adopted on 14 June 2001 in WDRs Order No. 5-01-177 with an effective date of 14 June 2006. The Discharger requested flexibility in the permit time schedule to complete the WWTP improvements. The CDO requires the Discharger to complete the construction of the necessary improvements by 30 September 2007, which is beyond the five-year period allowed for the exemption of mandatory penalties. The proposed CDO contains the time schedule requested by the Discharger. However, since the Discharger has exhausted a 5-year compliance period allowed under the law, the compliance deadline for the Effluent Limitation No. B.1.B cannot be extended and the Discharger may be subject to penalties set forth in section 13385(i) of the CWC.

2. The CDO requires the Discharger to comply with WDR Order No. 5-01-177 requirements to install continuous effluent monitoring equipment for chlorine residual and turbidity. The Discharger has requested to be allowed to collect grab samples in lieu of the installing the continuous chlorine monitoring device and have the schedule for installing the continuous turbidity monitoring device delayed until the new facility is constructed.

The WWTP is staffed for approximately twelve to nineteen hours per week and is left unmanned for the remaining period of time (149 hours). The WWTP operators manually control the flow of wastewater through the WWTP using a gate valve on the V-Notch Weir and other treatment processes are also operated/controlled manually. During the wet season the influent flow rate is subject to significant variation and the influent flow rates may increase from 11,000 gallons per day (gpd) to 45,000 gpd. A significant number of the cited effluent violations have occurred when the WWTP was left unmanned. The WWTP uses chlorination for

disinfection. Chlorine excursions have occurred for extended time periods (over several days) without detection when the WWTP was unmanned. Having the continuous monitoring device in place should minimize the potential for additional violations. Even if the upgraded facility switches to an ultra violet disinfection system, chlorine is typically used for other purposes and will remain a concern.

Failure of the filtration system normally results in an increase in the number of waste particles in the effluent and a higher effluent turbidity. Turbidity monitoring may be used as an indicator of effective treatment, particularly, filter performance and is necessary to monitor compliance with effluent limitation for turbidity. The continuous monitoring equipment will be connected to an automated alarm system that will prompt an early operator response.

3. The CDO requires the Discharger to comply with Monitoring and Reporting Program No. 5-01-177 and to conduct chronic toxicity testing. If the chronic toxicity monitoring indicates the potential for toxicity in the effluent, then the Discharger shall conduct a Toxicity Identification Evaluation (TIE) to identify the cause of toxicity. The Discharger is requesting that the toxic identification evaluation be deferred until after the new treatment facility upgrade is completed and only if future toxicity test results then indicate that a TIE is warranted.

The Discharger is not required to conduct a TIE at this time, rather the CDO requires the Discharger to comply with Monitoring and Reporting Program No. 5-01-177 and WDRs Order No. 5-01-177 Provision No. E.6, that requires chronic toxicity testing. If toxicity is found in the sample, then the Discharger must conduct a TIE at that time.

This information is critical for the Discharger to plan, design, build and operate the WWTP to prevent toxicity.

Mgmt. Review _____
Legal Review _____

4/5 May 2006 Region 5 Board Meeting
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