

ITEM: 15

SUBJECT: City of Grass Valley Wastewater Treatment Plant, Nevada County

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

BACKGROUND: The City of Grass Valley (Discharger) owns and operates a wastewater collection, treatment, and disposal system that provide sewerage service to the City of Grass Valley with a population of approximately 8,500. The treatment system consists of an equalization pond, bar screening, primary sedimentation, alkalinity adjustment, biological treatment by activated sludge (including nitrification and denitrification), secondary sedimentation, filtration and ultraviolet light (UV) disinfection. The outfall is equipped with a streamside cascade aerator. Tertiary treated wastewater is discharged to Wolf Creek, a tributary to the Bear River within the Bear River Watershed.

Drainage from an abandoned mine portal, the Drew Tunnel, owned by Newmont USA Limited, was exposed onto the Discharger's wastewater treatment plant property during excavation for a facility upgrade project in the year 2000. The Discharger was not sure of the origins of the flow, and in good faith routed the drainage water to the facility for treatment. The mine drainage, which ranges from 0.3-1.0 million gallons per day, is piped to the storage reservoir and pumped to the aeration basins for treatment prior to discharge to Wolf Creek. The mine drainage contains elevated levels of aluminum, iron, manganese, and is low in pH and temperature. During rainfall events, drainage from the Drew Tunnel can introduce large volumes of cold, low pH water to the aeration basins, which impacts plant operational functionality as it greatly reduces the effectiveness of the nitrification and denitrification biological system and can result in elevated metals concentrations in the effluent.

Existing Cease and Desist Order No. R5-2009-0068 (CDO) includes a compliance schedule for final effluent limitations for cyanide, chlorodibromomethane, dichlorobromomethane, manganese, nitrate plus nitrite, nitrite, and total coliform organisms required in existing Waste Discharge Requirements (NPDES Permit) No. R5-2009-0067. The final compliance date was 1 March 2010. As of 1 September 2009, after the Discharger upgraded the existing facility and the new UV disinfection and upgraded biological nitrogen removal process came online, the Discharger has demonstrated compliance with the final effluent limitations for cyanide, chlorodibromomethane, dichlorobromomethane, nitrite, and total coliform organisms. However, the Discharger is still not able to consistently comply with effluent limits for manganese and nitrate-plus-nitrite due to drainage from Drew Tunnel. Additionally, although the Discharger has not exceeded its final total coliform organisms effluent limitations since the installation of the UV disinfection system in September 2009, the performance and effectiveness of the new UV disinfection system is still being addressed.

Since the adoption of the existing NPDES Permit and existing CDO, through litigation and subsequent settlement negotiations between the Discharger

and Newmont Limited USA (Newmont), it has been determined that the Drew Tunnel discharge is the responsibility of Newmont. Newmont has agreed to re-route the Drew Tunnel discharge to a new treatment facility which it will own and operate. The flow from Drew Tunnel will continue to be connected into the Grass Valley Wastewater Treatment Plant until Newmont completes the construction of the new treatment facility. To properly isolate and treat the mine discharge, Newmont needs to complete several tasks which include land and right-of-way acquisition, California Environmental Quality Act (CEQA) documentation, construction of piping and treatment facilities, NPDES permitting approval, and plant start up. The current projected schedule for completion of these tasks is 1 June 2014.

ISSUES:

The Discharger submitted timely public comment, in which Central Valley Water Board staff concurred and addressed through modification of the tentative CDO, with the exception of the following issue:

The Discharger requests that the Central Valley Water Board extend the compliance schedule to 12 June 2014 from the proposed compliance schedule expiration of 31 May 2014 so that the compliance date will coincide with the current NPDES permit expiration date. The Discharger believes that this will minimize potential confusion with the applicable effluent limitations.

Staff does not concur. A compliance schedule is determined based on the shortest reasonable time period for a discharger to achieve compliance and is determined independently of the NPDES permit's expiration date. The 31 May 2014 schedule date was determined from the project schedule set forth by Newmont USA Limited to remove the Drew Tunnel discharge from the influent to the Discharger's wastewater treatment plant. There is no relationship between the proposed compliance date and the NPDES Permit expiration date. Therefore Central Valley Water Board staff recommends adopting the tentative CDO and compliance schedule as proposed.

Mgmt. Review _____

Legal Review _____

27 May 2010

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