

ITEM: 21

SUBJECT: City of Portola, Portola Wastewater Treatment Plant-Plumas County

BOARD ACTION: *Consideration of NPDES Permit Renewal and uncontested rescission of Cease and Desist Order No. 93-068.*

BACKGROUND: The City of Portola (hereinafter Discharger) is the owner and operator of the Portola Wastewater Treatment Plant (hereafter Facility). The Discharger provides sewerage service for the community of Portola and serves a population of approximately 2,300 residents and many businesses, but few, if any industrial facilities. The facility average dry weather flow design capacity is 0.5 mgd. Secondary treated effluent from the Facility is discharged Seasonally (1 November to 31 April) to the Middle Fork of the Feather River. The proposed permit allows discharge only when there is a 50:1 ultimate dilution available in the River.

The treatment Facility consists of a series of facultative ponds with some minor aeration. Two lift stations discharge to the headworks, which has a bar screen and a parshall flume for each lift station. The Facility is equipped with chlorination and dechlorination facilities for disinfection as well as chlorine removal prior to discharge to the Middle Fork of the Feather River.

Cease and Desist Order No. 93-068 required that the discharger provide upgrades to their collection system, including pump station refurbishment, by 1 February 1995. To comply with the CDO the Discharger established an Infiltration and Inflow (I/I) identification and correction program. In the late 1990's, the Discharger completed three compliance projects. One project, grant funded by the State Water Resources Control Board Small Community Grant Program for \$3.2 million, consisted of manhole replacement and repair, as well as replacement or repair of seven and one half miles of sewer system piping. The second project, funded by the State Revolving Loan Fund (\$875,000) consisted of the rehabilitation of the two lift stations in the sewer system and other repairs. The third project consisted of the repair or replacement of laterals from individual homes, partially funded by a Community Development Block Grant. After system repair, the collection system was not adequately challenged by high rainfall and snowmelt, to gauge its performance, until the winter of 2005/2006, at which time the collection system performed adequately.

The Discharger, the California Sportfishing Protection Alliance (CSPA), and the Central Valley Clean Water Association (CVCWA) submitted comments on the tentative NPDES Permit issued for public review on 13 April 2009. Minor editorial revisions and

changes have been made to the tentative Permit in response to the Dischargers comments.

ISSUES:

The major issues discussed in the public comments from CSPA and the Discharger are summarized below. Further details on all comments are included in Regional Water Quality Control Board (Regional Water Board) staff Responses to Comments.

Effluent Ammonia Limitations –The Discharger is concerned that they may not be able to meet their effluent ammonia limitations upon permit adoption, and have requested a time schedule for compliance. Regional Water Board Staff believes that the Discharger should have little problem meeting effluent limitations and declines to establish a time schedule for compliance.

Groundwater Monitoring – The Discharger does not feel that groundwater monitoring is necessary for the facility due to the numerous other studies required by the Tentative Order. Staff disagrees in that the pond system may be adversely impacting groundwater and therefore groundwater monitoring is necessary to determine any impact.

Effluent Diffuser Installation – The Discharger does not believe an outfall and effluent diffuser is practical because of the conditions between the final pond and the discharge point, including the fact the area is in a flood plain and a Wild and Scenic River area. The Tentative Order has been modified to grant the Discharger additional time to install the outfall and diffuser.

Effluent Percentage Removal Limitations for BOD– CSPA contends that the relaxation of effluent percentage removal limitations for BOD is not in compliance with 40 CFR 133.101 (g) and does not meet the anti backsliding requirements of 40 CFR 122.44. The tentative Order has been modified to require 85 percent removal of BOD and TSS. The Order also requires the discharger to monitor effluent BOD and TSS during the summer (the discharge prohibition period), the most challenging period for pond compliance, to determine whether the Discharger, despite appropriate operation and maintenance, can achieve an effluent limitation of 30/30 for effluent BOD and TSS. If the Discharger cannot demonstrate this performance, the Order may be reopened to established relaxed limitations of percentage BOD and COD removal in accordance with 40 CFR 133.101(g).

Mixing Zone analysis - CSPA contends that the mixing zone analysis provided does not comply with the SIP or the Basin Plan. As discussed further in the Response to comments, the Basin Plan and the SIP allow the Regional Board to authorize a mixing zone and

dilution credit. Where there is incomplete mixing, the Regional Board may authorize a mixing zone following a mixing zone study. The Discharger performed a modeling study to establish the mixing zone boundaries, and establish a minimum dilution of 20:1 at the edge of the mixing zone. Effluent limitations for copper and ammonia are based upon this mixing zone

Degradation of Groundwater Quality – CSPA contends that the proposed Order allows for groundwater degradation absent an Anti-degradation Analysis. Staff contends that the requirement for groundwater monitoring and a BPTC analysis will ensure the discharge complies with State Board resolution 68-16.

Electrical Conductivity – CSPA contends that the effluent Limitation for Electrical Conductivity will cause and contribute to exceedance of the Basin Plan Water Quality Objective. The Basin Plan includes a salinity objective of 150 umhos/cm at a 90th percentile for well-mixed waters of the Middle Fork of the Feather River at 25 degrees Celsius. Historical data in the Board's files indicates this objective was to be applied as a 10 year rolling average (Basin Plan at Table III-3 p. III-7.00; Tentative Order at p. F-28). Because 10 years of data is not available at this time, a conclusion that the discharge of Portola's effluent to the Middle Fork of the Feather River will cause or contribute to an exceedance of the water quality objective is speculative.

Hardness – CSPA contends that the proposed Permit fails to base effluent limitations for metals based on the actual ambient hardness of the surface water. As discussed in the Response to Comments, Regional Water Board staff used the lowest hardness value of the effluent for determining the copper effluent limitation. This methodology is protective of the receiving water in establishing a copper effluent limitation.

RECOMMENDATION: Adopt the proposed order.

Mgmt. Review _____
Legal Review LTO