

ITEM: 10

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

BOARD ACTION: Consideration of NPDES Permit Renewal and Time Schedule Order

BACKGROUND: The City of Nevada City (hereinafter Discharger) is the owner and operator of the City of Nevada City Wastewater Treatment Plant (hereinafter Facility), a publicly owned treatment works. Tertiary treated effluent is discharged to Deer Creek, a tributary to the Yuba River. The proposed NPDES permit authorizes a minor discharge of up to 0.69 million gallons per day (mgd) to the receiving water. The Discharger provides sewerage service for the City of Nevada City and serves a population of approximately 3,050. The design average dry weather flow capacity is 0.69 MGD.

The proposed NPDES permit contains new and/or more stringent effluent limitations for zinc. The effluent limitations for zinc are based on implementation of the California Toxics Rule and the State Implementation Policy. A Time Schedule Order (TSO), including a time schedule and corresponding interim effluent limitation, is proposed for the new and more stringent effluent limitations in which the Discharger is unable to immediately comply.

The Discharger and the California Sportfishing Protection Alliance (CSPA) submitted comments on the tentative NPDES Permit issued for public review on 24 September 2008. Some minor revisions have been made to the proposed permit and TSO in response to the comments received and are included in the agenda package.

ISSUES: The major issues discussed in the public comments are summarized below. Further detail on all comments is included in Regional Water Quality Control Board (Regional Water Board) staff Responses to Comments:

Ammonia Effluent Limitation – The Discharger requested that the maximum pH effluent limitation be revised to 8.0 standard units and that the ammonia limits, which are pH and temperature dependant, be adjusted accordingly. The Discharger states that records indicate that monthly pH values for the last year have been 7.0 or less.

The proposed Order has been revised to lower the instantaneous maximum pH limitation to 8.0. The effluent limitation for ammonia has also been adjusted based on the new effluent limit for pH. The revised ammonia effluent limitations are an average monthly effluent limit of 2.0 mg/L and a maximum daily effluent limit of 5.8 mg/L. The ammonia limits in the tentative permit were an average monthly effluent limit of 0.3 mg/L and a maximum daily effluent limit of 1.0 mg/L.

Cyanide Effluent Limitation – The Discharger commented that it has no record of the data point classified as the maximum effluent concentration (MEC) for cyanide. It stated that all analytical results were non-detect with the exception of one result at 2 µg/L. The Discharger submitted laboratory reports showing test results for cyanide sampling.

The sample in question occurred on 15 October 2002. The Discharger provided additional lab sheets showing the sample in question with the result of 13 µg/L was the result of a laboratory error. The reanalyzed sample resulted in a non-detect value for cyanide. Using the correct analytical value in the reasonable potential analysis shows that cyanide does not pose reasonable potential and an effluent limitation is not required. The effluent limitation for cyanide has been removed from the tentative permit.

BOD₅ and TSS Percent Removals – CSPA commented that the percentage removal of 5 day biochemical oxygen demand (BOD₅) and total suspended solids (TSS) required in the existing permit (95%) must be required in the proposed permit. The proposed permit only contains a percentage removal of BOD and TSS of 85%.

Technology-based effluent limitations for publicly owned treatment works are specified in the Code of Federal Regulations (CFR), Title 40, Part 133, otherwise known as the Secondary Treatment Regulations. 40 CFR §133.102 provides the technology-based effluent quality requirements for BOD₅, TSS, and pH. In the regulation, the percent removal for BOD₅ and Total Suspended Solids (TSS) is a minimum of 85 percent.

Case-by-case effluent limitations are technology-based limits developed utilizing the permit writer's best professional judgment (BPJ). However, case-by-case effluent limitations are only allowed "to the extent that EPA-promulgated effluent limitations are inapplicable." (40 CFR §125.3(c)(2)) The EPA has promulgated the secondary treatment regulations and considered the percent removal requirements for BOD₅ and TSS in the development of those regulations. Therefore, the imposition of more stringent effluent limitations is only allowed if necessary due to water quality impacts. The percent removal requirement of 95 percent in the previous Order is based on a mistaken interpretation of the law. As a result, the 85 percent removal for BOD₅ and TSS in the proposed permit is the appropriate effluent limitation and is based on the secondary treatment requirements found in 40 CFR §133.102(a)(4)(iii) and 40 CFR §133.102(b)(3).

Mgmt. Review _____

Legal Review LTO

4/5 December 2008

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