

ITEM: 12

SUBJECT: City of Jackson, Wastewater Treatment Plant, Amador County

BOARD ACTION: *Consideration of NPDES Permit Renewal (NPDES No. CA0079391), New Time Schedule Order, and Amending Order (amending existing Time Schedule Order No. R5-2011-0909)*

BACKGROUND: The City of Jackson (City) owns and operates the Wastewater Treatment Plant (Facility) that is currently authorized to discharge 0.71 million gallons per day (mgd) of disinfected equivalent to Title 22 tertiary-level treated effluent to Jackson Creek; which is tributary to Lake Amador. Lake Amador is a popular recreational resort for boating, fishing, and swimming. Water from Lake Amador is also used by a local sturgeon fish farm that produces premium quality caviar and by local residents for irrigation purposes via Jackson Valley Irrigation District's (JVID) distribution system. Water from Lake Amador is currently used as a drinking water source. JVID is in the process of securing Mokelumne River water (via Pardee Reservoir) as a source of drinking water for the bulk of potable water users. This transfer of sources is expected to be fully complete by 2017. In addition, there are residents reportedly using JVID delivered raw irrigation water (from Lake Amador) for household uses. In response to a California Department of Public Health (DPH) compliance agreement, JVID has notified these residents and provided access to bottled water, but the concern remains that some residents may be using the raw irrigation water as potable water. As funding allows, JVID is working with DPH to provide these remaining residents access to adequately treated potable water from the Mokelumne River source. As a safety precaution to protect potable water users, DPH in a letter (13 July 2007) recommended that the Central Valley Water Board restrict the City from discharging greater than 5% volume of effluent in Lake Amador (20:1 dilution Prohibition). Consequently, the City's existing NPDES Permit, Order R5-2007-0133-01, contains a 20:1 dilution Prohibition that is effective 1 March 2015. Because Lake Amador water will continue to be used as a potable source, the proposed NPDES Permit contains a 20:1 dilution Prohibition that is effective immediately, and a reopener provision that allows the 20:1 dilution Prohibition to be removed when DPH provides to the Board determination that it is no longer necessary.

The City plans Facility upgrades to provide Title 22 tertiary level treatment of the municipal wastewater; planned upgrades are improved nitrification/denitrification and coagulation/flocculation processes, and replacement of chlorine disinfection with ultraviolet (UV) disinfection system. Upgrades are projected to be operational by 1 March 2018.

The proposed NPDES permit contains final effluent limitations for biological oxygen demand, pH, total suspended solids, chlorodibromomethane, copper, cyanide, dichlorobromomethane, zinc, ammonia, nitrate plus nitrite, total trihalomethanes, whole effluent toxicity, total residual chlorine and UV specifications, total coliform organisms, flow, and mercury. The City cannot immediately comply, and therefore, the proposed Time Schedule Orders provide compliance schedules for chlorodibromomethane, copper, cyanide, dichlorobromomethane, zinc, ammonia, nitrate plus nitrite, total trihalomethanes, and total coliform organisms and interim effluent limitations

until the Facility upgrades are operational.

ISSUES:

Public comments on the tentative NPDES Permit were received from the City, The Oaks Community Association, JVID, Lake Amador Resort, Sterling Caviar LLC, and Central Valley Clean Water Association (CVCWA).

Staff does not concur with all of the comments and has resolved many of the public comments through subsequent meetings and discussions. Staff has made appropriate changes to the proposed NPDES permit.

The following is a summary of the comments on the 20:1 dilution prohibition, which is the major permitting issue, and the staff responses.

Prohibition III.E. The Oaks Community Association, JVID, and Sterling Caviar LLC state many concerns regarding the City's continued effluent discharge to Lake Amador and the potentially negative impacts to:

1. Municipal supply water and human health when Lake Amador becomes a secondary potable water source;
2. Contact recreational and local fish hatchery industrial uses;
3. Local farming of consumptive food products; and
4. Long term environmental health of Lake Amador.

Staff does not concur; the proposed NPDES Permit implements California Code of Regulations Water Recycling Criteria, requires compliance with water quality standards for protection of human health and aquatic life, and implements the 20:1 dilution Prohibition per CDPH recommendation. The City is required to comply with the final effluent limitations by 1 March 2018.

The City and CVCWA believe that imposition of a 20:1 dilution prohibition is only based on best professional judgment and may create compliance problems for the City during drought years. As described above, the 20:1 dilution prohibition is based on recommendation by CDPH for the protection of public health.

RECOMMENDATION: Adopt the proposed NPDES Permit Renewal and Time Schedule Orders.

Mgmt. Review AWL

Legal Review DC

5/6 December 2013 Board Meeting

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