

ITEM: 13

SUBJECT: City of Sacramento, Combined Wastewater Collection And Treatment System, Sacramento County

BOARD ACTION: *Consideration of NPDES Permit Renewal*

BACKGROUND: The City of Sacramento (Discharger) owns and operates a combined sewer system (CSS) that conveys domestic and commercial wastewater and storm water runoff from downtown Sacramento, East Sacramento, and Land Park areas. The Discharger also owns and operates a separate sanitary sewer system that conveys domestic and commercial wastewater from parts of the City surrounding the CSS to the north, east, and south, which is regulated under a separate order.

The CSS consists of four main complexes to manage the collected combined sewage: Sumps 1/1A, Sumps 2/2A, the Pioneer Reservoir Treatment Plant, and the Combined Wastewater Treatment Plant (CWTP). The CSS conveys domestic and industrial wastewater and storm runoff to Sumps 1/1A and Sumps 2/2A, where up to 60 million gallons per day (mgd) flows are pumped via the Regional Force Main to the Sacramento Regional County Sanitation District's Sacramento Regional Wastewater Treatment Plant (SRWTP) for secondary treatment prior to discharge to the Sacramento River. When flow to Sumps 2/2A exceeds 60 mgd, flows are automatically routed through the Pioneer Interceptor to available storage in the Pioneer Reservoir. After available storage in the Pioneer Reservoir is exhausted, flows are routed to the CWTP to maximize available storage, before flows are sent to the Pioneer Reservoir treatment facility for treatment and discharge to the Sacramento River.

The Pioneer Reservoir provides primary treatment and disinfection for up to 250 mgd. After the wastewater is dechlorinated, it is discharged to the Sacramento River. Flows can also be sent via the CWTP Force Main to the CWTP, where an additional 130 mgd of combined wastewater receives primary treatment and disinfection prior to discharge to the Sacramento River. During extreme high flow conditions, discharges of untreated combined wastewater may occur at Sumps 2/2A and at Sumps 1/1A. Each of the six permitted combined sewer overflow (CSO) discharge points (Discharge Point Nos. 002 through 007) discharge directly to the Sacramento River, a water of the United States, within the Sacramento-San Joaquin Delta.

The proposed NPDES permit contains requirements, primarily in the form of special provisions, to ensure that the Discharger complies with the USEPA CSO Control Policy and continues to make progress towards achieving the goals established as part of their 1995 Combined Sewer System Improvement Plan. These goals include reducing untreated combined sewer discharges to the Sacramento River and reduction in outflow (i.e., flooding) potential from the CSS control structures and collection system.

ISSUES: The Discharger, California Sportfishing Protection Alliance (CSPA), U.S. Environmental Protection Agency (USEPA) Region 9, and the California Urban Water Agencies (CUWA) submitted public comments regarding the tentative NPDES permit. The major issues discussed in the public comments are summarized below. Some minor changes have been made to the proposed NPDES permit in response to the comments. Further detail on all comments is included in Central Valley Water Board staff Responses to Comments.

Discharger Comments

Publicly Owned Treatment Works (POTW) and State Implementation Policy (SIP)

Applicability: The Discharger comments that the CSS is not a POTW, and as a CSO discharger, not subject to the SIP. Central Valley Water Board staff concurs with the Discharger, and has made several revisions in the proposed NPDES permit to clarify applicability of various permit provisions.

Executive Officer Approval: The Discharger expressed concern that Executive Officer approval of any changes to the Combined Wastewater Control System Plan of Operations was unnecessarily limiting. Although staff concurs that the provision needs to provide more flexibility, the changes suggested by the Discharger were determined to be too subjective and unenforceable. Therefore, revisions were made in the proposed NPDES permit to specify a timeframe for a response by the Executive Officer when modifications are proposed by the Discharger.

CSS Outflow Reporting: The Discharger requests that CSS outflow reporting be limited to discharges to separate storm drains or surface waters. Central Valley Water Board staff concurs with the Discharger, as discharges to the combined sewer system storm drains will be managed in accordance with the Combined Wastewater Control System Plan of Operations. Modifications were made to those specific provisions that require notification when outflows discharge to separated storm drains that may reach surface waters.

CSPA Comments

Degradation of Beneficial Uses and Lack of Compliance with Water Quality Standards and Objectives: CSPA comments that, due to the characteristics of the CSO discharges from the CSS, the designated uses of the Sacramento River are not being protected. Further CSPA comments that the proposed NPDES permit does not comply with water quality standards and objectives contained in the Water Quality Control Plan.

The July 1995 Combined Sewer System Improvement Plan constitutes the Discharger's long-term control plan (LTCP). The USEPA CSO Control Policy allows for use of the presumption approach, where a program that meets certain performance criteria would be presumed to provide an adequate level of control to meet the water quality-based requirements of the CWA. The Discharger's LTCP, which is based on the presumption approach, generally exceeds the specifications of the CSO Control Policy's presumption approach.

The proposed permit requires continued implementation of the Discharger's LTCP as it relates to the capture and treatment of a minimum of 85 percent of the combined sewer flows. However, since the Discharger has not evaluated whether its implemented LTCP projects under the presumption approach are ensuring continued compliance with water quality standards or are adequately protecting designated uses, a special provision has been included in the proposed NPDES permit that requires this assessment and revisions to the LTCP as necessary to meet applicable water quality standards and protect designated uses.

Antidegradation Analysis: CSPA comments that the proposed NPDES permit contains no antidegradation analysis contrary to the fact that Sacramento is a growing community where flows to the CSS would also be expected to expand.

Central Valley Water Board staff does not concur. The Discharger's LTCP, developed in accordance with the USEPA CSO Control Policy, is designed to reduce and/or eliminate CSO discharges. As described in the response above, the Discharger has shown that the Discharger's LTCP generally exceeds the specifications of the CSO Control Policy's presumption approach. In fact, implementation of the LTCP has generally reduced the number of CSO events that have occurred over time.

USEPA Region 9

Effluent and Receiving Water Monitoring: USEPA Region 9 supports careful characterization of CSO discharges from the CSS, including monitoring for mercury and methylmercury, ammonia, acute whole effluent toxicity (WET), and priority pollutants in any CSO discharge, and ammonia, acute WET, and fecal coliform in the receiving water downstream of the CSO discharges. Central Valley Water Board staff concurs

and has added the monitoring requirements to the proposed NPDES permit.

Evaluation of Untreated Discharges: USEPA Region 9 suggested that the Discharger be required to evaluate the circumstances under which untreated combined sewage is discharged to the Sacramento River. Due to the potential downstream impacts to the Sacramento River, the Central Valley Water Board staff concurs, and has included a requirement in the proposed NPDES permit for the Discharger to prepare and submit an Untreated Discharge Evaluation Report when untreated CSO discharges occur.

CUWA

Pathogen Monitoring: CUWA requests that the monitoring program require the Discharger to monitor the discharge and the receiving waters for *Giardia* and *Cryptosporidium* whenever there are discharges from the system. Fecal coliform monitoring is not adequate to assess the impact of the discharge on drinking water supplies. Central Valley Water Board staff concurs that partially treated CSO discharges may impact downstream drinking water supplies. The required CSS Water Quality Assessment special study requirements in the proposed NPDES permit has been modified to include *Giardia* and *Cryptosporidium*.

Reopener Provision: CUWA requests that the Central Valley Water Board add a specific reopener to incorporate future water quality objectives designed to protect drinking water supplies. The proposed NPDES permit already includes a reopener provision that allows for modification when any new or amended applicable water quality standards are promulgated.

Notification of Drinking Water Agencies: CUWA requests that the Central Valley Water Board include a requirement that the Discharger immediately notify downstream drinking water agencies when discharges from the combined system occurs to allow the downstream water agencies to take preventive measures to protect the public health of their customers. Central Valley Water Board staff concurs that notification of downstream water utilities should be included as part of the public notification process. The special provision in the proposed NPDES permit requiring public notification has been modified to include this requirement.

Mgmt. Review _____
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