STATE OF CALIFORNIA CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Adrienne Miller) MEETING DATE: April 8, 2009

ITEMS: 8 a and b

- SUBJECT:Fairfield-Suisun Sewer District, Fairfield-Suisun Wastewater Treatment Plant and
Collection System, Fairfield, Solano County—Reissuance of NPDES Permit (Item 8a)
and Adoption of Cease and Desist Order (Item 8b)
- CHRONOLOGY: August 2003—Permit reissued July 2006—Permit amended
- **DISCUSSION:** The Revised Tentative Order (Appendix A) would reissue the NPDES permit for the Fairfield-Suisun Wastewater Treatment Plant and the Fairfield-Suisun Sewer District's collection system. The Revised Tentative Cease and Desist Order (Appendix B) addresses immediate compliance problems with new and more stringent effluent limits in the new proposed permit for copper, cyanide, dichlorobromomethane, and chlorodibromomethane.

The District owns and operates the wastewater treatment plant, which serves a population of about 132,500, providing advanced secondary treatment of domestic, commercial, and industrial wastewater from the cities of Fairfield and Suisun, and some unincorporated areas of Solano County. The plant has a dry weather design capacity of 17.5 million gallons per day (MGD), and the District plans to increase this capacity to 23.7 MGD during the term of this permit. (A July 2006 permit amendment conditionally approved the increase, but to date the District has not implemented the increase.) The current peak wet weather treatment capacity is 34.8 MGD. The plant discharges primarily to Boynton Slough, which flows to Suisun Slough and then to Suisun Bay. The July 2006 amendment also allowed discharges to Ledgewood Creek, which also flows to Suisun Bay. Finally, a relatively small amount of effluent flows to two privately owned duck ponds in Suisun Marsh.

We received comments (Appendix C) from the District, Bay Area Clean Water Agencies, San Francisco Baykeeper, and Las Gallinas Valley Sanitation District. As explained in our Response to Comments (Appendix D), we resolved many of the concerns through revisions to the draft orders distributed for public comment. All these revisions are reflected in the two attached revised tentative orders. The District's and Bay Area Clean Water Agencies' primary remaining concern is with the proposed dioxins limits. Our approach on dioxins is similar to how dioxins have been handled in recently adopted NPDES permits.

The Baykeeper requested additional analysis and explanation in a number of areas. Primarily, the Baykeeper expressed concern about proposed dilution credits for cyanide, and the lack of an evaluation to determine if limits for dissolved oxygen and temperature are needed. In response to the cyanide concerns, we have expanded on the discussion justifying dilution credit for cyanide in accordance with State policy, and recalculated cyanide limits for the District's discharges to Ledgewood Creek and the duck ponds using zero dilution. This is because those discharges and dilution for them were not addressed in the Board's recently approved cyanide site-specific objectives. Also, the District has not provided any justification for dilution for those discharges. We also added a requirement to the Revised Tentative Cease and Desist Order that would require a mixing zone study to determine if dilution credits can be justified. In response to the Baykeeper's concern about dissolved oxygen and temperature, we conducted an analysis using available data which concluded that no effluent limits for these parameters are necessary. Nevertheless, we added a provision requiring a Ledgewood Creek temperature study so that better information would be available for the next permit.

The Las Gallinas Valley Sanitation District commented on the approach for determining whether limits for ammonia were necessary. The approach used in the Revised Tentative Order is identical to the approach used in recent permits and is consistent with the Board's Basin Plan. The Las Gallinas Valley Sanitation District will have another opportunity to raise issues specific to its discharge when its permit comes up for reissuance this autumn.

RECOMMEN-

DATION: Adopt the Revised Tentative Order and Revised Tentative Cease and Desist Order

FILE	Case File: 2129.2005
NUMBER:	CIWQS Place ID: 225526

- APPENDICES: A. Revised Tentative Order
 - B. Revised Tentative Cease and Desist Order
 - C. Comment Letters
 - D. Response to Comments