

Executive Officer's Summary Report  
8:30 a.m., January 27, 2011  
Regional Water Quality Control Board  
David C. Joseph Hearing Room  
5550 Skylane Blvd., Suite A  
Santa Rosa, California

Item: 4

Subject: Public Hearing on Order No. R1-2011-0004, to consider adoption of Waste Discharge Requirements for **City of Fortuna Municipal Wastewater Treatment Plant**, NPDES No. CA0022730, WDID No. 1B83135OHUM, Humboldt County

### DISCUSSION

The City of Fortuna (hereinafter Discharger) is currently discharging pursuant to Order No. R1-2007-0007 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0022730. On August 3, 2010, the Discharger submitted a request for modification of final copper effluent limitations and supporting documentation entitled *Performance of Ceriodaphnia dubia Toxicity Testing in Support of Development of a Copper Water-Effect Ratio (WER) for Application to the City of Fortuna Wastewater Treatment Plant in Humboldt County, California*. Considering the nature of the proposed modification and expiration date for Order No. R1-2007-0007, it was decided that the issuance of a new NPDES permit was appropriate.

The Discharger owns and operates a municipal wastewater treatment plant and associated collection system and disposal facilities. The Facility serves approximately 7,000 residential, commercial, and institutional users in the City of Fortuna and 4,000 residential users in the Rohnerville-Campton Heights Area. The current wastewater treatment system consists of screening, grit removal, influent pumping, primary sedimentation, activated sludge processes, secondary sedimentation, chlorination, dechlorination, as well as anaerobic biosolids digestion, dewatering and composting. The Facility is currently designed to treat an average dry-weather flow (ADWF) of 1.5 million gallons per day (mgd) and reports an influent peak wet weather flow (PWWF) capacity of 7.0 mgd. Peak influent flows over 3-4 mgd are bypassed to three equalization ponds and returned for treatment during low flow periods.

From October 1 through May 14 each year, wastewater is discharged through Discharge Point 001 to Strongs Creek, a water of the United States, and a tributary to the Eel River within the Ferndale hydrologic subarea. During the summer months (May 15 through September 30), treated wastewater is discharged to three percolation ponds adjacent to the Eel River at Discharge Point 003.

The solids handling facilities are designed with a capacity of 1.9 mgd. Biosolids generated during the treatment process are thickened, anaerobically digested and dewatered using a belt filter press. On October 7, 2009, the Discharger submitted an application for permit coverage requesting a conditional waiver of waste discharge requirements for management and reuse of WWTF biosolids materials. The application was revised and amended on February 1 and August 5, 2010 respectively (August 2010 application). The August 2010 application describes the procedures used at the WWTF to convert sewage sludge to Exceptional Quality (EQ) classified biosolids derived compost material as well as the proposed subsequent use of that material for 1) soil amendment applied on agricultural lands, 2) bagged soil amendment received and applied by ratepayers for use in their private yards, or 3) marketing by a commercial fertilizer enterprise. Adoption of a waiver or other regulatory mechanism is scheduled for Regional Water Board consideration in May 2011.

During the term of Order No. R1-2007-0007 the Discharger has conducted an individual Water Effects Ratio (WER) study to determine the site-specific toxicity of copper in the receiving water at the point of discharge to the Eel River. The study was conducted in accordance with applicable USEPA guidance for Streamlined Procedure EPA-822-R-01-005 and concluded that a site specific WER of 4.63 for total recoverable copper applies to the discharge.

Using the worst-case measured hardness from the receiving water (89 mg/L as CaCO<sub>3</sub>), the USEPA recommended dissolved-total translator of 0.96, and the site-specific WER, the criterion for protection of aquatic organisms under chronic exposure conditions is adjusted to 37.5 ug/L, as total recoverable copper. The maximum effluent concentration measured for total copper in the City of Fortuna's effluent is 23 ug/L, based on samples collected during the discharge season from February 2008 through March 2010. Applying the new WER information, effluent copper concentrations do not demonstrate reasonable potential to exceed water quality criteria for copper when compared to criteria for the most sensitive beneficial use to be protected. Had this information been available at the time of permit issuance, no effluent limitations for copper would have been included in Order No. R1-2007-0007. Therefore, by removing effluent limitations for copper, the protection afforded under Order No. R1-2011-0004 will result in a level of protection for beneficial uses equal to the previous conditions of Order No. R1-2007-0007.

A copy of the draft Order and/or information to access the draft on the Regional Water Board website was mailed to the Discharger, interested agencies, and persons. This item was opened for public comment from November 16, 2010 to December 16, 2010. No comments were received.

PRELIMINARY STAFF  
RECOMMENDATION:

Adopt Order R1-2011-0004 as proposed.