

EXECUTIVE OFFICER SUMMARY REPORT
September 12, 2012

- ITEM: 6
- SUBJECT: NPDES Permit Issuance: Waste Discharge Requirements for San Diego Gas and Electric, Palomar Energy Center, Discharge of Cooling Tower Blowdown and Low Volume Wastes to the Pacific Ocean via the San Elijo Ocean Outfall (Tentative Order No. R9-2012-0015, NPDES No. CA0109215) (*Michelle Mata*)
- PURPOSE: To issue NPDES Permit No. CA0109215 with the adoption of Tentative Order No. R9-2012-0015.
- RECOMMENDATION: Adoption of Tentative Order No. R9-2012-0015 is recommended.
- KEY ISSUES:* Each entity that discharges wastewater into the City of Escondido Industrial Brine Collection System (IBCS) is considered to be a “Discharger” and is subject to NPDES permit requirements.
- DISCUSSION: San Diego Gas and Electric (SDG&E) owns and operates the Palomar Energy Center (PEC). The PEC is a 550-megawatt natural gas-fired combined cycle power plant located in Escondido, CA which discharges up to 1.4 million gallons per day (MGD) of cooling tower blowdown and low volume waste to the City of Escondido’s IBCS and Land Outfall for conveyance to the San Elijo Ocean Outfall. The discharge is subject to the United States Environmental Protection Agency (USEPA) technology- based effluent limitation guidelines for the Steam Electric Power Generating Point Source Category found at Title 40, Code of Federal Regulations, Part 423 (40 CFR 423).
- The City of Escondido (City) constructed the IBCS in order to minimize the discharge of salts to the City’s sanitary sewer collection system. Brine wastewaters contain concentrated amounts of dissolved minerals resulting in elevated levels of total dissolved solids (TDS), which is not removed by conventional municipal wastewater treatment processes. The resulting elevated concentrations of TDS

can interfere with secondary biological wastewater treatment processes and adversely affect the usability of recycled water.

Wastewater from the IBCS is discharged into an equalization basin that feeds directly into the City's Land Outfall and is then conveyed to the San Elijo Ocean Outfall where it commingles with discharges from the City's Hale Avenue Resource Recovery Facility and the San Elijo Joint Powers Authority's San Elijo Water Reclamation Facility. The San Elijo Ocean Outfall extends into the Pacific Ocean approximately 6,800 feet at a depth of approximately 110 feet.

Discharges from the PEC are currently regulated under Order No. R9-2005-0139, which was issued to the City as the owner/operator of the brine collection system. On March 17, 2010, the City submitted a Report of Waste Discharge (RWD) and application for reissuance of Order No. R9-2005-0139. Subsequently, after consultation with USEPA, it was determined that issuance of individual NPDES Permits directly to the owner/operator of facilities discharging into the brine collection system rather than to the City was required by USEPA NPDES regulations at 40 CFR 122.21 pertaining to the duty to apply for and obtain an NPDES Permit. By e-mail dated June 17, 2011, the San Diego Water Board notified all known IBCS Dischargers of its intent to issue individual NPDES permits for discharges to the IBCS. To date, one individual NPDES permit has been issued to Stone Brewing Co. for its discharge into the IBCS.

SDG&E submitted a RWD and application for an NPDES permit on December 15, 2011. The RWD and application was deemed complete on January 13, 2012. Order No. R9-2005-0139, which has an expiration date of September 14, 2010, was administratively extended in accordance with 40 CFR 122.6.

The Tentative Order has been developed based on the information submitted as part of the RWD and application, through monitoring data, and other available information. The Tentative Order implements the requirements of the Clean Water Act and Code of Federal Regulations adopted thereunder, and the California Water Code. If adopted, the Tentative Order would rescind Order No. R9-2005-0139 and reissue the NPDES permit for the discharge from the PEC to the Pacific Ocean. The Tentative Order will remain effective

for a five year fixed term.

Comments were received from the City of Escondido and SDG&E (Supporting Document Nos. 3 and 4). A Response to Comments Document and Errata Sheet will be prepared to address all comments. The Response to Comments Document and Errata Sheet will be included in the supplemental agenda package.

LEGAL CONCERNS: None

SUPPORTING DOCUMENTS:

1. Location Maps
2. Tentative Order No. R9-2012-0015
3. Comment Letter from the City of Escondido dated July 24, 2012
4. Comment from SDG&E submitted via e-mail on July 27, 2012

SIGNIFICANT CHANGES: The Tentative Order includes the following significant changes to Order No. R9-2005-0139:

1. The City of Escondido is no longer named as the Discharger.
2. Mass based limitations for cooling tower blowdown have been calculated based on a flow of 1.1 MGD (the highest monthly average flow observed during the term of the current Order) in accordance with USEPA regulations (40 CFR 423), which require mass based limits to be calculated based upon a reasonable measure of actual production. Mass-based limits were previously calculated based on the maximum flow of 1.4 MGD to account for variances in flow of the new discharge.
3. The point of compliance for both technology-based and water-quality based effluent limitations has been moved from the IBCS to the PEC facility.

COMPLIANCE RECORD: During the term of Order No. R9-2005-0139, according to the City of Escondido's reports, there were seven effluent limitation violations. A summary of the violations and enforcement actions taken is provided in Attachment F, Page F-7 of the Tentative Order (Supporting Document No. 2).

PUBLIC NOTICE: By e-mail dated June 27, 2012, copies of the Tentative Order were sent to SDG&E and to all known interested

persons and posted on the San Diego Water Board's website. A public notice was published in the San Diego Union Tribune.