



Board Meeting Agenda Memorandum

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**TO:** Honorable Board of Directors  
West County Wastewater District

**DATE:** February 19, 2020

**REPORT BY:** Lisa Malek Zadeh, General Manager

**SUBMITTED BY:** Andrew Clough, Deputy General Manager

**AGENDA ITEM:** Adopt a Resolution authorizing the General Manager to execute the amended agreement for Supply of Chlorinated Secondary Effluent with East Bay Municipal Utility District (EBMUD)

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**RECOMMENDED ACTION**

The Board adopt a resolution authorizing the General Manager to execute the Second Amended Agreement for the supply of chlorinated secondary effluent with the East Bay Municipal Utility District (EBMUD).

**CURRENT SITUATION**

West County Wastewater District (WCWD) currently provides chlorinated secondary effluent to EBMUD for further treatment and distribution to the Chevron Richmond Refinery and other potential users pursuant to an agreement with EBMUD executed on November 20, 1990 (1990 Agreement). The 1990 Agreement was amended on April 24, 2007 (2007 Agreement).

Staff from WCWD and EBMUD have been working together to closely monitor the current operations to ensure adherence with the secondary effluent criteria. Discussions have been underway for over a year to finalize the terms and conditions of the Second Amended Agreement (Agreement) for supply of chlorinated secondary effluent. A summary of the Agreement is provided below and the entire Agreement is attached.

- More accurately reflects current operating conditions.
- Clarifies definitions.
- Identifies reporting requirements.
- Provides that the Agreement may be amended by mutual consent of both parties.

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BOARD MEMBERS: D. Alvarado S. Stanley C. Sudduth H. Wiener C. Zepeda  
BOARD ATTORNEY: A. Cabral  
GENERAL MANAGER: L. Malek-Zadeh

- Defines the water quality criteria of the delivered secondary effluent and ensures that the Agreement does not allow for EBMUD to “regulate” the WCWD but instead works together as a partner.
- Both partners acknowledge and accept that the Recycled Water Projects and Recycled Water Reliability Upgrades have been completed.
- Provides updated water quality criteria for total chlorine residual (> 1.0 mg/L), ammonia (< 1.0 mg/L), and conductivity (< 900 umhos/cm).
- Eliminates specific criteria for leachate received from West County Landfill.
- Establishes a basis of payment of \$17,000 per month for Delivered Secondary Effluent, including a monthly incentive of \$2,000 if monthly average ammonia concentrations are less than or equal to 1 mg/L, and contains a simplified methodology for annual adjustments.
- Establishes clear ownership, operation and maintenance responsibilities for both partners, including the intent by WCWD to use its best efforts to provide up to 12.5 million gallons per day of high quality Delivered Secondary Effluent.
- Affirms that both parties recognize the benefits of recycling municipal wastewater effluent for irrigation, industrial, and other non-potable uses as a means of conserving limited potable water resources and reducing wastewater discharges to the San Francisco Bay, and are committed to partner to maximize use of WCWD Delivered Secondary Effluent.

### **BACKGROUND**

A brief description of the 1990 Agreement and the 2007 Agreement is provided below. A summary of all of the related agreements was provided to the Board on March 6, 2019. A copy of that summary is attached.

### **AGREEMENT FOR SUPPLY OF CHLORINATED SECONDARY EFFLUENT AND MODIFICATION AND OPERATION OF EFFLUENT CONVEYANCE FACILITIES**

- Parties: WCWD and EBMUD
- Date: November 20, 1990
- Duration: Twenty years, until November 20, 2010. This agreement was superseded by the April 24, 2007 RARE Agreement with EBMUD.
- Essential Terms: This agreement facilitated the construction of the EBMUD advanced wastewater treatment facility at which EBMUD provides tertiary treatment to WCWD effluent and delivers the tertiary treated water to Chevron. It required the WCWD to supply approximately six million gallons per day of chlorinated secondary effluent to EBMUD’s Chevron Water Reclamation Project. The effluent had to meet two criteria: total chlorine residual less than 1.0 mg/l and ammonia of less than or equal to

5 mg/l. EBMUD was required to design and construct the necessary facilities. This agreement became a point of contention between EBMUD and WCWD when Chevron became concerned that the water from the advanced facility was not meeting their needs.

**FIRST AMENDED AGREEMENT FOR SUPPLY OF CHLORINATED  
SECONDARY EFFLUENT AND MODIFICATION AND OPERATION  
OF EFFLUENT CONVEYANCE FACILITIES  
(THE “RARE” PROJECT AGREEMENT)**

Parties: EBMUD and WCWD

Date: April 24, 2007

Duration: Thirty years: ends April 24, 2037 (will be superseded by the Second Amended Agreement, if approved)

Essential

Terms: Amends the November 20, 1990 agreement for supply of chlorinated secondary effluent to supply effluent to EBMUD for micro filtration and reverse osmosis to provide water suitable for Chevron’s boilers. EBMUD is required to design and construct recycled water projects consisting of a supply pipeline from the WCWD’s 36” force main on Gertrude to the Chevron property boundary, a micro filtration backwash recycle pipeline back into the WCWD’s system, modifications to the WCWD’s NRWRP to enable WCWD to store and equalize WCWD primary flows in wet weather and all other facilities needed to convey WCWD chlorinated secondary effluent to the RARE project.

These improvements, collectively referred to as the Recycled Water Projects at the EBMUD facilities and the Recycled Water Reliability Upgrades at the NRWRP have been completed.

Additional details of this Agreement can be found in the attached Board Report dated March 6, 2019.

**STRATEGIC PLAN COMPLIANCE**

Entering into this agreement is consistent with the Strategic Plan by demonstrating environmental leadership through maximizing resource recovery.

**FISCAL IMPACT**

WCWD will receive a monthly payment (basis of payment) from EBMUD of \$17,000 to cover the difference between the monthly power and chemical costs incurred by the operation of the recycled water reliability upgrades required to ensure WCWD’s

effluent met EBMUD requirements. If the monthly average ammonia concentration in the secondary effluent is less than or equal to 1 mg/L, EBMUD will pay WCWD an additional \$2,000 for that month. It is anticipated that WCWD will be able to regularly achieve the 1 mg/L criteria.

**ALTERNATIVE(S)**

1. Continue to operate under the current 2007 Agreement. This agreement does not accurately reflect current operating conditions.
2. Continue to negotiate with EBMUD regarding the terms of the Second Amended Agreement.

**SUPPORTING DOCUMENTATION:**

- A. C EBMUD-WCWD Supply of Secondary Effluent Agreement - final
- B. D EBMUD Staff Report March 6 2019
- C. E Exhibit G WCWD-EBMUD BioWin Inputs
- D. F Exhibit H WCWD-EBMUD Influent Data
- E. G Exhibit I final WCWD-EBMUD Process Modeling Support TM
- F. H Exhibit J WCWD-EBMUD Process Modeling Support Revision TM

**RESOLUTION OF THE BOARD OF DIRECTORS OF WEST COUNTY  
WASTEWATER DISTRICT, COUNTY OF CONTRA COSTA, CALIFORNIA**

**RESOLUTION NO.**

**AUTHORIZING THE GENERAL MANAGER TO EXECUTE A SECOND AMENDED  
AGREEMENT FOR SUPPLY OF CHLORINATED SECONDARY EFFLUENT WITH  
THE EAST BAY MUNICIPAL UTILITY DISTRICT**

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The Board of Directors finds and determines that:

- A. West County Wastewater District (WCWD) is responsible for the collection, treatment, and disposal of wastewater within its jurisdictional boundaries.
- B. WCWD and the East Bay Municipal Utility District (EBMUD) both recognize the benefits of recycling municipal wastewater effluent for irrigation, industrial, and other non-potable uses as a means of conserving limited potable water resources and reducing wastewater discharges to the San Francisco Bay.
- C. WCWD provides chlorinated secondary effluent to EBMUD for further treatment and distribution to the Chevron Richmond Refinery (Chevron) and other potential users pursuant to an agreement with EBMUD executed on November 20, 1990 (1990 Agreement) that was amended on April 24, 2007 (2007 Agreement).
- D. EBMUD is responsible for the distribution and sale of water for municipal, domestic, and industrial uses to land within its service area, and operates the North Richmond Water Reclamation Plant (NRWRP) and Richmond Advanced Recycled Expansion (RARE) facility to further treat chlorinated secondary effluent from the WCWD to produce recycled water for Chevron's cooling towers, boilers and other potential users.
- E. Pursuant to the 1990 Agreement, EBMUD financed and constructed facilities required to operate the NRWRP, including but not limited to, modifications to the WCWD effluent pump station, the influent pipeline from the WCWD effluent pump station to the NRWRP, the bypass pipeline from the NRWRP to WCWD's effluent discharge pipeline, and the emergency sludge pipeline from the NRWRP to WCWD's sludge lagoon distribution pipeline.
- F. Pursuant to the 2007 Agreement, EBMUD financed and constructed facilities required to operate the RARE facility to treat additional quantities of chlorinated secondary effluent from WCWD at a new microfiltration and reverse osmosis treatment plant located at Chevron to produce high-purity recycled water suitable for use in Chevron's boilers.
- G. WCWD constructed recycled water reliability upgrades at the WCWD Water Quality Resource Recovery Plant that include four main components: (1)

Ammonia Removal Improvements, (2) Secondary Sedimentation Optimization Project, (3) Alkalinity Feed System, and (4) Total Nitrogen Removal Improvements.

- H. WCWD is willing to make available to EBMUD through operation of the improvements constructed as part of the recycled water reliability upgrades, chlorinated secondary effluent meeting the specific water quality criteria as defined in Exhibit B of the Agreement.

**NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE WEST COUNTY WASTEWATER DISTRICT AS FOLLOWS:**

1. The foregoing recitals are true and correct statements of fact and are incorporated into this Resolution.
2. The Board of Directors of the West County Wastewater District, County of Contra Costa, California hereby authorizes the General Manager to:
  - a. Execute a Second Amended Agreement for Supply of Chlorinated Secondary Effluent with the East Bay Municipal Utility District

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I **HEREBY CERTIFY** that the foregoing resolution was duly and regularly adopted by the Board of Directors of the West County Wastewater District, Contra Costa County, California, at a regular meeting thereof held on the 19th day of February 2019, by the following vote:

AYES:

NOES:

ABSENT:

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Vice-President of the Board of Directors  
West County Wastewater District  
Contra Costa County, California