

# SWEETWATER AUTHORITY

Water Quality Committee

June 16, 2025



## Consideration to Authorize Desalination Facility Chemical Storage Tanks Procurement

### RECOMMENDATION

Staff recommends that the Governing Board award a contract for procurement of Desalination Facility chemical storage tanks to Core-Rosion Products of Signal Hill, CA in an amount not to exceed \$183,300.

### OVERVIEW

The Richard A. Reynolds Desalination Facility (Desal Facility) utilizes 12.5 percent sodium hypochlorite for disinfection and 50 percent sodium hydroxide (caustic soda) for pH adjustment. Both chemicals are stored on-site in large fiberglass reinforced plastic (FRP) tanks. The tanks are original and have been in service since the initial Desal Facility construction in 1999.

### Rationale for the Tanks Replacement

#### Sodium Hypochlorite Storage Tank

Since 2017, the 8,000-gallon sodium hypochlorite storage tank has undergone repairs twice: once due to minor leaking at the base and another time due to internal surface degradation. Repairs involved relining the tank interior with a new protective corrosion barrier and fiberglass. Given the frequency of repairs, the critical role of this chemical in the treatment process, and associated safety concerns, staff recommends replacing the existing tanks with new tanks made of fiberglass reinforced plastic (FRP) or crosslinked high-density polyethylene (XHDPE).

#### Sodium Hydroxide Storage Tank

The 4,000-gallon sodium hydroxide storage tank has never needed to be repaired; however, it is of the same age and type as the sodium hypochlorite tank and may be at an elevated risk for failure. Additionally, due to space constraints in the chemical tank room for this tank to be replaced, the sodium hypochlorite tank may need to be removed due to the current configuration of the chemical building. Thus, it makes sense to replace this tank at the same time as the sodium hypochlorite tank.

#### Replacement Plan & Logistics

The chemical tank room on the south side of the facility is enclosed by a seam metal roof, block wall, and iron bars making tank replacement difficult. Installing new tanks will require removing parts of the roof or walls. To maintain efficiency and reduce long-term maintenance, staff recommends replacing the tanks in kind (same size and material). Alternatives such as multiple smaller tanks or crosslinked high-density polyethylene (XHDPE) tanks were considered but dismissed due to increased

complexity, cost, and shorter lifespan. Staff is also exploring whether the roof can be modified to provide permanent access for future replacements. An additional budget request of \$130,000 was included in the FY 2025-26 Budget to cover the cost of installing the new chemical tanks.

**Request for Quote - Desalination Facility Chemical Storage Tanks Procurement**

Based on the current tanks’ dimensions and operational needs, the following scope of work was defined for the project.

Scope of Work

Procurement, delivery, and unloading of two (2) bulk chemical storage tanks:

- Sodium Hypochlorite Tank: 8,000 Gallon capacity, fiberglass-reinforced plastic (FRP), Diameter: 11’-0”, Height: 11’-4” Straight Shell Wall (SSW) National Sanitation Foundation (NSF) 61 Certified vinyl ester resin coated
- Sodium Hydroxide Tank: 4,750 Gallon capacity, fiberglass-reinforced plastic (FRP), Diameter: 9’-0”, Height: 10’-0” SSW
- NSF 61 Certified vinyl ester resin coated internal; Gel coated with UV inhibitor external
- Fittings and access entryways as requested by staff

On May 15, 2025, a request for quote (RFQ) was issued on Planet Bids for the Desalination Facility Chemical Storage Tanks Procurement. A pre-bid meeting was not held. The engineer’s estimate for the tank procurement was \$180,000.

Bid Results

The bid opening took place on June 5, 2025. Only one (1) quote was received in response to the RFQ, as summarized in Table 1 below.

Vendor	Quoted Cost	Responsive to the RFQ
Core-Rosion Products	\$183,300	Yes

**FISCAL IMPACT**

The FY 2024-25 Budget includes \$220,000 for the replacement of both tanks, an additional \$130,000 was requested in the FY 2025-26 Budget to cover tank installation. No contingency will be required at this time as this bid is solely for tank procurement. The remaining project funds from FY 2024-25 of \$31,890 will be carried over in the project to FY 2025-26 and be utilized towards installation of the tanks (SP Objective: SR2.14). An additional \$130,000 in funding was requested for FY 2025-26 to install the tanks, which would leave the project balance at \$161,890 (Table 2). The engineer’s estimate for installation was \$170,000. Staff will come back to the Board with the installation contract during FY 2025-26.

Table 2

Desalination Facility Chemical Storage Tank Replacement (20258004)	
FY 2024-25 Project Budget	\$220,000
Less Expenses to Date	<\$4,810>
Less Tank Purchases	<\$183,300>
Remaining Project Budget for FY 2024-25	\$31,890
FY 2025-26 Additional Project Budget Request	\$130,000
Remaining Project Budget for Installation (FY 2024-25 + FY 2025-26)	\$161,890

**OPTIONS**

1. Award a contract for Desalination Facility Chemical Storage Tanks Procurement to Core-Rosion Products of Signal Hill, CA in an amount not to exceed \$183,300.
2. Reject bid and re-advertise the Project in FY 2025-26.
3. Other direction as determined by the Governing Board.

Staff Contact:

Carlos Quintero, P.E., General Manager

Roberto Yano, P.E., Assistant General Manager

Justin Brazil, Director of Water Quality

Kyehee Kim, Ph.D., P.E., Engineering Manager, Water Resources and Environmental

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## **SUPPORTING INFORMATION**

### **Attachments**

1. Desalination Facility Chemical Room Configuration
2. Request for Quote-2025-007
3. Staff Presentation

### **Strategic Plan**

#### *FY 2024-25 Strategic Plan*

Strategic Plan Goal #2: System and Water Supply Reliability (SR) – Achieve an uninterrupted, long-term water supply through investment, maintenance, innovation and developing local water resources

- Objective SR16: Replace the original sodium hypochlorite and sodium hydroxide chemical storage tanks at the desalination facility.

#### *FY 2025-26 Strategic Plan*

The FY 2025-26 Strategic Workplan includes an objective for the Boards consideration to install new chemical storage tanks at the Desalination Facility.

Strategic Plan Goal #2: System and Water Supply Reliability (SR) – Achieve an uninterrupted, long-term water supply through investment, maintenance, innovation and developing local water resources

- Objective SR2: Cost-effectively maintain facilities and infrastructure to optimize their useful life and performance
  - (14) Install new sodium hypochlorite and sodium hydroxide chemical storage tanks at the desalination facility. Tanks will be procured prior to June 2025.

### **Past Board Action**

June 12, 2024

The Board approved the FY2024-25 Strategic Plan Detailed Work Plan as presented.