



EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 26, 2026

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager 

FROM: Serge V. Terentieff, Director of Engineering and Construction 

SUBJECT: Upper San Leandro (USL) Water Treatment Plant (WTP) Maintenance and Reliability and USL and Sobrante WTPs Chemical System Safety Improvements Project Update

This memorandum provides an update on construction of Specification 2128: USL WTP Maintenance and Reliability and USL and Sobrante WTPs Chemical System Safety Improvements Project (Project). The attached progress report includes accomplishments and progress since the November 6, 2025 update, including community outreach, fiscal status, and near-term planned work.

A major project highlight was the completion of various work areas such as the sedimentation tanks' flocculation baffle walls, improvements to two existing steel detention basins, and improvements to existing spent wash water basins, which allowed the USL WTP to return to service in October 2025. The project has continued to make progress in multiple process areas at the USL WTP as it remained in service through February 2026. Mass excavation for the chlorine contact basin has been completed. Work on Phase 1.2 of the permanent chemical facilities has continued at USL and Sobrante WTPs. The project will now focus on construction of the new chlorine contact basin and electrical building, completion of chemical improvements, and new dewatering equipment.

The next update will be provided in an information memo on August 6, 2026.

CCC:SVT:mjh

Attachment: 2026 Triannual Progress Report No. 1

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2026 Triannual Progress Report No. 1

Specification 2128: Upper San Leandro (USL) Water Treatment Plant (WTP) Maintenance and Reliability, and USL and Sobrante WTP Chemical Systems Safety Improvements Project

USL WTP was in full operation starting in fall 2025 to allow for testing of newly installed equipment, and to support rate restrictions at Orinda WTP, a winter outage of Central Reservoir, and the investigation and possible repair of a leak on the Sequoia Aqueduct. The project has continued to make progress in multiple process areas at the USL WTP as it remained in service through February 2026. Mass excavation for the chlorine contact basin (CCB) has been completed. Work on Phase 1.2 of the permanent chemical facilities has continued at USL and Sobrante WTPs. A detailed summary of work progress is listed in this attachment.

Project Scope

The scope of work at the USL WTP includes:

- Replacement of the raw water control valve, demolition and replacement of existing flocculation baffle walls, and installation of a fifth stage of flocculation
- Replacement of the solids removal system in the sedimentation basin
- Demolition of filter No. 1 and demolition of the fluoride building
- Demolition and replacement of the chlorine contact basin
- Demolition and replacement of the clear well wood-framed roof with an aluminum roof
- Construction of a new spent wash water basin (No. 3), and associated improvements to existing spent wash water basins (No. 1 and No. 2), and the reclaim system
- Construction of a new concrete gravity thickener and improvements to two existing steel detention basins
- Demolition and replacement of main plant switchgear, installation of two new substations, a new power building, and other electrical improvements throughout the plant
- Demolition and replacement of the chemical feed systems and other chemical systems safety improvements
- Implementation of security improvements

The scope of work at the Sobrante WTP includes:

- Demolition and replacement of the chemical feed system and other chemical system safety improvements

The scope of work at the USL Reservoir Outlet Tower includes:

- Installation of a seismic accelerometer and uninterruptable power supply at the shore of USL Reservoir

Community Outreach Update

- Resident concerns regarding noise and vibration continue to be addressed
- Resident concerns voiced at a meeting on October 23, 2025, included the removal of trees to construct security fencing and new primary switchgear; the District is reviewing the replanting plan and working with the contractor for replanting to begin by fall 2026
- The District's website was updated to show site work progress

Progress Status Update

Safety

- Continued active safety culture to encourage everyone at the jobsite to identify safety hazards for immediate correction

Maintenance and Reliability Improvements

- Completed the work in the north flocculation-sedimentation basin; both basins are now complete
- Completed the mechanical and instrumentation installation and testing work at Detention Basins No. 1 and No. 2; both basins are now in service
- Completed instrumentation installation and testing at Spent Washwater Basins No. 1, No. 2, and No. 3. Mechanical improvements are ongoing. Spent Washwater Basins No. 1 and No. 2 are now in service
- Completed gravity thickener subgrade and foundation work; construction of the tank is now underway
- Completed vault valve installation, startup, and testing
- Completed the installation of the secant pile shoring system at the CCB
- Completed the second and third level of the CCB shoring waler bracing
- Completed CCB floor demolition, subgrade preparation, and installation of the underdrain piping
- Continued the installation of the electrical duct banks throughout the site and other improvements

Chemical Safety System Improvements

- Completed the mechanical and electrical internal demolition for first phase of chemical systems at the USL and Sobrante WTP – primary coagulant (PC), cationic polymer (CP), and caustic soda (CS)
- Continued with the Phase 1,2 replacement at USL WTP and Sobrante WTP of the existing chemical lines, tanks, and pumps for PC, CP, and CS chemicals

Scheduled Work

Construction is expected to be completed by fall 2028.

Maintenance and Reliability Improvements

- Begin the CCB foundation work
- Complete rehabilitation of detention basin No. 2
- Complete rehabilitation of spent wash water basins No. 1 and No. 2
- Complete installation of piping and vault work in the reclaim area
- Complete construction of the gravity thickener, which will reduce WTP water loss
- Start construction of the bioretention area that will reduce stormwater runoff
- Continue installation of electrical duct banks
- Begin installation of the new raw water control valve
- Begin installation of medium voltage power infrastructure – cabling, power building, unit substation 02

Chemical Safety Systems Improvements

Significant progress has been made on the chemical system improvements. However, this portion of work has been delayed approximately one year due to differing site conditions, operational constraints, and supply chain issues.

- Continue the replacement at USL WTP and Sobrante WTP of the existing chemical lines, tanks, and pumps for PC, CP, and CS chemicals and place in service

Fiscal Update

Budget Category	Spent To-date	Budget	Spent
Construction Contract (base)	\$164,477,171	\$237,332,710	69.3%
Construction Contract (change orders contingency – see Note 1)	\$22,341,146	\$30,853,252	72.4%
Engineering Support and Construction Management Costs	\$29,091,909	\$28,098,599	103.5%

Notes:

1. The current approved change order contingency budget is \$30,853,252, which represents 13% of the original contract amount of \$237,332,710. This change order contingency was recently raised from 7% to 13%, as noted under Financial Stability in the General Manager’s December 2025 Monthly Report, due to several changes including mechanical, electrical, safety, and piping scope changes, differing site conditions involving leaking infrastructure, and a change in the shoring system support for the chlorine contact basin demolition work.

Schedule Update

Schedule Category	Days Elapsed	Contract Days	Elapsed
Construction Contract Calendar Days	1,062	1,310* (3.6 years)	81%

*The latest schedule update from the District’s contractor forecasts a Ready for Service for the project of 1,900 days (5.2 years), approximately 600 days (1.6 years) behind schedule. The District is actively working with the contractor to make additional improvements to the overall construction schedule and will continue to develop and implement a recovery plan.

Construction Progress Photos



Figure 1 – Spent Wash Water Basin 3: completed the emergency overflow vault and piping



Figure 2 – USL Power Building: wiring work continues in preparation for energization



Figure 3 – Chlorine Contact Basin: underdrain installation



Figure 4 – Chlorine Contact Basin: excavation subgrade preparation



Figure 5 –Chlorine Contact Basin: excavation with completed subgrade preparation



Figure 6 – Solids Pumping Plant: demolished existing pumps and piping and prepared the suction barrels for condition assessment



Figure 7 - Solids Pumping Plant: began installation of thickened solids and detention basins transfer pumps and associated piping



Figure 8 - Solids Pumping Plant: began installation of downstream solids removal piping and service water piping



Figure 9 – Gravity Thickener: rebar mat for upcoming foundation pours



Figure 10 – Gravity Thickener: foundation concrete placement underway



Figure 11 – Gravity Thickener: construction of perimeter wall underway



Figure 12 – Sobrante Chemical Building: Phase 1.2 electrical and chemical work ongoing



Figure 13 – Sobrante Chemical Building: new caustic soda room



Figure 14 – Sobrante WTP: chemical area ongoing work for permanent chemicals



Figure 15 – Sobrante WTP: newly installed caustic soda chemical tank and skylight



Figure 16 – Sobrante WTP Chemical Building Roof: completed skylights and roof repair in progress



Figure 17 – Sobrante WTP Chemical Building Roof: completed HVAC equipment

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