

Oso Water Reclamation Plant Process Upgrade & Breakpoint Chlorination Facility Decommissioning



Council Presentation March 19, 2024











A summary of proposed improvements is as follows:

- Site demolition and partial removal of fencing, existing equipment, and infrastructure.
- Demolition and removal of blower house 3 and chemical storage canopy.
- Headworks splitter box weir gates improvements.
- Construction of new bioreactor and MLSS flow splitter structure. Installation of associated mechanical equipment, including fine bubble diffuser aeration system, gates, and access walkways.
- Rehabilitation of two aeration basins and the conversion to bioreactors consisting of the removal of existing air drops, and installation of new mechanical equipment, fine bubble diffuser aeration system, and access walkways.





- Construction of new RAS booster and WAS pump stations.
- Construction of new blower house 1, including the installation of six new blowers, new process air loop, HVAC and electrical systems and components.
- Installation of a pre-engineered electrical control building (ECR) #6, new cable trays and electrical systems.
- Replacement of secondary clarifiers 1 8 sludge removal system and structure rehabilitation.
- Installation of clarifiers 1-8 effluent channel diffuser system and valves, piping, and supports.
- Upgrades to scum system, including the construction of new rotary drum screens, pumps, and miscellaneous equipment, including platforms and handrails.





- Sodium hypochlorite and sodium bisulfite system upgrades which include tanks, piping, and pumps.
- Modifications to aerated solids holding tank 1.
- Rehabilitation solids dewatering facility including installation of new volute dewatering presses, volute thickening units, canopy, and miscellaneous equipment.
- Outfall structure modifications and stilling well/flow metering replacements.
- Replacement of four existing chlorine contract chamber sludge pumps and valve system.
- Installation of various yard piping and utility lines (potable and nonpotable water)
- Temporary facilities and utilities.





- Site work, pavement, and drainage improvements
- Installation of new underground electrical power line to replace existing AEP overhead electrical power line. Includes demolition of lines, power poles, and tie-ins to AEP new metering poles.
- Instrumentation and SCADA upgrades.
- Installation of new plant-wide fiber optic loop and associated appurtenances.
- Start-up and Commissioning
- Training of plant personnel.





2020 - 2023	2023 2024					2024 - 2028
January - October	N	D	J	F	M	April - February
Design	Bid/Award					Construction

Projected Schedule reflects City Council award in March 2024 with anticipated completion in February 2028.