



Puente Hills Intermodal Facility

Construction Tour – A Senior Engineer (Field Engineering) points south towards the existing Union Pacific Railroad and Puente Hills Materials Recovery Facility (MRF) and describes the construction of a dedicated thoroughfare that will allow Districts' vehicles from the MRF direct access to the new Intermodal Facility. The new Intermodal Facility will be the point of origin of the Waste-by-Rail system that will transport unrecovered solid waste via railroad over 200 miles to the new Mesquite Regional Landfill.



Joint Water Pollution Control Plant

(JWPCP) Tour – A Supervising Engineer, (Wastewater Management) starts the tour of the Districts' largest wastewater treatment plant (design flow is 400 MGD) by taking student engineers to the inlet works. The students are getting a close look at the bar screens. The nine bar screens at JWPCP are the beginning of the primary treatment process.



Joint Water Pollution Control Plant (JWPCP) Tour –Engineering students are shown the JWPCP control room where operations staff can monitor plant equipment and performance through the control computer system.



Puente Hills Materials Recovery Facility (PHMRF) Tour – A Senior Engineer (Solid Waste Operations and Engineering) points out the different areas where refuse is separated and recycled within the 215,000 square foot and 55 foot tall processing building. The purpose of the PHMRF is to provide waste diversion and publicly owned transfer capacity for Los Angeles County. This facility helps L.A. County meet the 50% diversion rate required under California law while providing for cost effective transfer of municipal solid waste to landfills using transfer trucks or rail cars. The facility is permitted to accept 4,400 tons per day and 24,000 tons per week of municipal solid waste. It is projected that residual waste from the PHMRF will be loaded into rail containers and delivered to the Puente Hills Intermodal Facility for transfer to the Mesquite Regional Landfill.



Leo J. Vander Lans Advanced Water Treatment Facility (AWTF) Tour – A Senior Engineer (Water Replenishment District (WRD)) explains the AWTF that provides advanced treatment to effluent from the adjacent Sanitation District’s Long Beach Water Reclamation Plant. The AWTF uses microfiltration (MF), reverse osmosis (RO) and ultraviolet light (UV) to produce purified water near distilled quality. The water is blended with imported water and pumped into the Alamitos Seawater Barrier to protect groundwater from seawater intrusion. MF is a low-pressure membrane process that removes fine particles, protozoa, and provides an efficient pretreatment prior to the RO process. RO is a high-pressure membrane process that forces water through the molecular structure of a thin-film membrane that filters out minerals and contaminants, including salts, viruses, pesticides and other materials. The UV process then ensures disinfection of the product water.



Los Coyotes Water Reclamation Plant Sewer Rehabilitation Tour – Engineers from Sewer Design and Field Engineering, along with their contractor, describe the process that is necessary to rehabilitate the underlying sewer. The collapsed white tubing on the trailer is inserted into the sewer along with a resin. The rehabilitating materials must be carefully introduced and then allowed to cure under specific conditions to form a tight-fitting and corrosion-resistant replacement pipe.