

Episode 008 - Staffing Innovation - Skilled and Certified Operators

Despite the advances in technology - from lab testing equipment to the application of automation and artificial intelligence - the safety and quality of the water the Las Virgenes - Triunfo Joint Powers Authority (JPA) treats is dependent on the skill and dedication of the state-certified operators. Host Riki Clark is joined by Water Systems Manager Darrell Johnson to discuss the evolving landscape and new opportunities available for treatment operators at the JPA with the Pure Water Project.

Definitions and Terms:

California Water Environment Association (CWEA) - Founded in 1928, CWEA empowers wastewater professionals as they protect California's most critical resource: water. Our community of 10,000+ professionals represent all facets of wastewater management and resource recovery, from operators to lab techs to engineers. www.CWEA.org

Challenge Testing - a method used to evaluate the performance and effectiveness of water treatment technologies under specific challenging conditions. It involves subjecting the treatment system to various simulated or real-life scenarios that mimic the most demanding and extreme operating conditions it may encounter.

Joint Powers Authority - A partnership between the TWSD and LVMWD to collect and treat the Malibu Creek Watershed region's wastewater at the Tapia Water Reclamation Facility. Areas served include Calabasas, Agoura Hills, Oak Park, Westlake Village and Parts of Thousand Oaks.

Micro Filtration.Ultra Filtration MF/UF - Bundles of membrane filters remove large particles and bacteria. The first of the three steps utilized in teh Advanced Purification process.

Operator in Training (OIT) - An Operator-In-Training (OIT) is a person working at a wastewater treatment plant (WWTP) who is gaining the experience necessary to become a certified operator. OITs must complete at least 1,800 hours in wastewater operations to become certified.

Rancho - Las Virgenes Composting Facility (Rancho) - Opened in 1994, this facility takes bio-solids captured in the wastewater treatment process at Tapia and turns them into compost to be given away to customers.

Reverse Osmosis (RO) - A process where water is pressurized and forced through a semi-permeable membrane that has extremely small pores. These pores are sized to allow water molecules to pass through while effectively blocking contaminants, including salts, minerals, bacteria, viruses, and most dissolved solids. This separation occurs due to the selective permeability of the membrane. The second of the three steps ustilized in the Awwanced Purification process.

State Water Project Dependent Area - Certain areas of the Metropolitan Water District of Southern California's service area that, due to piping and pumping capabilities, are only able to accept water from the State Water Project and are unable to get water from other sources such as the Colorado River

Tapia Water Reclamation Facility (Tapia) - The JPA's waste water treatment plant. Located along Malibu Creek Watershed, Tapia tertiary treats the JPA's waste water to create high quality recyceld water suitable for non-potable use.

Tertiary treatment - An additional level of filtration and disinfection in the wastewater treatment process to create the highest quality recycled water suitable for non-potable use.

Title 22 Tertiary Treated Recycled Water - The recycled water that the JPA provides that due to additional treatment can be used for irrigation including on food crops.

Ultraviolet / Advanced Oxidation (UV/AO) - UV light and sodium hypochlorite/bleach is used to break down any remaining contaminants and disinfect water. The final step in the Advanced Purification process.