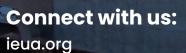
Inland Empire Utilities Agency (IEUA) was formed on June 6, 1950, with the mission to provide supplemental water to the Chino Basin. Today, the Agency focuses on providing key services including: securing and supplying imported water; treating wastewater; developing recycled water, local water resources, and conservation programs to reduce the region's dependence on imported water supplies; converting biosolids and waste products into a high-quality compost made from recycled materials; and generating electrical energy from renewable sources.

A five-member Board of Directors is elected to represent residents within a 242-square-mile area. IEUA provides services to Chino, Chino Hills, Cucamonga Valley Water District, Fontana, Fontana Water Company, Montclair, Monte Vista Water District, Ontario, San Antonio Water Company, Upland, and West Valley Water District.

Inland Empire Utilities Agency **Regional Water Recycling Plant No. 5**



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mextdoor
@IEUAwater

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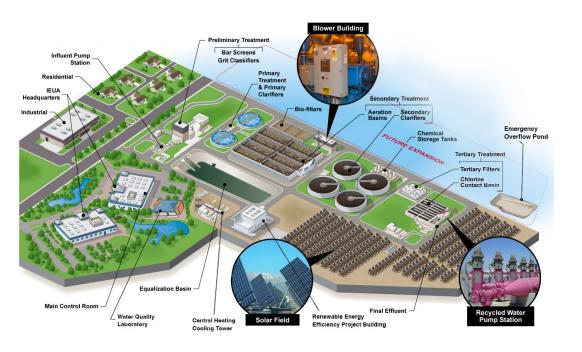
Thinking in Terms of Tomorrow

SECONDARY CLARIFIER 4B



Regional Water Recycling Plant No. 5 (RP-5)

Regional Water Recycling Plant No. 5 (RP-5) includes several treatment processes that contribute to providing quality recycled water pursuant to the state of California Title 22 regulations. Major treatment processes include raw wastewater pumping, preliminary treatment, primary treatment, secondary treatment, and tertiary treatment. Each treatment process is equipped with automation for controlling and monitoring of plant operations.



RP-5 currently treats liquids only and has a capacity of 16.3 million gallons per day (MGD). The RP-5 facility is currently being expanded to treat both liquids and solids. Liquids capacity will increase to 22.5 MGD with an ultimate build out to treat an average of 30 MGD and a peak flow of 60 MGD.

Bar screens Sand & grit removal

Wastewater Treatment Process



Raw Wastewater Pumping: Wastewater from the RP-5 service area collection system flows by gravity into the Influent Pump Station where it is pumped to the preliminary treatment facility.

Primary Treatment: Wastewater is distributed

equally between two primary treatment settling tanks

that allow the flow of the wastewater to slow down

enough to settle out the heavy solids by gravity.



Primary Clarifier

Primary treatment removes about 65% of the organic solids contained in the wastewater. These solids are referred to as biosolids.

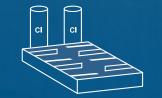
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The settled biosolids are concentrated, stabilized by anaerobic digestion, dewatered, and made into compost for beneficial reuse.

Aeration Basin

Secondary Clarifier

Secondary Treatment: A biological nutrient removal 5 system that includes aeration basins in which the organic solids are consumed by microorganisms and secondary clarification. This process removes in excess of 90% of the organic material in the wastewater.



Chlorine Contact Basin

Disinfection: After filtration, disinfection is provided through the use of sodium hypochlorite (bleach) which is added to the tertiary effluent (recycled water) as it enters the tanks for a minimum time period to ensure no pathogenic organisms (i.e. disease bearing bacteria and viruses) remain in the water.

Preliminary Treatment: A physical process that consists of measuring the quantity of wastewater that flows into the facility, removing large materials like rags, sticks, Styrofoam, and miscellaneous debris with mechanically operated coarse screens and removing inorganic material such as sand and gravel. These materials are stored in large bins and disposed of at a landfill.

4

Primary Effluent Flow Equalization and Diversion: When the amount of primary effluent exceeds the RP-5 secondary treatment capacity, the primary effluent can be routed and temporarily stored in the Equalization Basin.

6

Tertiary Treatment: The secondary effluent flows by gravity to tertiary treatment through a network of filters containing sand media designed to remove in excess of 99% of the remaining total solids.

Following disinfection, the recycled water flows by gravity from the chlorine contact basins into a common channel. From this channel, the water will either be discharged to a creek (prior to being discharged to a creek, water is dechlorinated), pumped to provide utility water within the facility, delivered to industrial users for irrigation, or pumped to basins for groundwater recharge.