North City Water Reclamation Plant

About the Plant
The City of San Diego imports approximately 90 percent of its water supply. To meet the future potable water demands while decreasing our dependence on imported water, the City has developed and implemented innovative water management strategies.

The North City Water Reclamation Plant (NCWRP) is the first large-scale water reclamation plant in San Diego's history and part of the single largest sewerage system expansion in the area in more than 35 years. This state-of-the-art facility can treat up to 30 million gallons of wastewater per day which is generated by northern San Diego communities. Wastewater entering the plant undergoes a series of treatment and purifying steps using the latest technologies to supplement the water supply of the region.

Reclaimed water produced at the NCWRP is distributed throughout the northern region of San Diego via an extensive reclaimed water pipeline. More than 79 miles of distribution pipelines are installed in Mira Mesa, Miramar Ranch North, Scripps Ranch, University City, Torrey Pines, Santaluz and Black Mountain Ranch to provide reclaimed water to our customers for irrigation, landscaping and industrial use.

The NCWRP Operations Building includes the plant operations staff which monitors and controls every phase of the treatment process through a central control room. The Operations Building also includes process laboratories where samples of wastewater from every stage of treatment are analyzed. From 12:30 a.m. to 5:30 a.m. control of the North City plant is transferred to Public Utilities' Communications Center in Kearny Mesa and an operator from NCWRP is on call in the event of an emergency.

Pumping Process
Untreated wastewater (influent) enters the plant through an 84 inch pipeline beneath the I-805 and flows into North City's Influent Pump Station. Four pumps at the influent pump station pump the wastewater up a 90 feet rise to the Headworks. From the Headworks, through the remaining treatment process, the majority operates through gravity flow.

Plant’s Power
All the power required to operate the North City Water Reclamation Plant is provided by an on-site Cogeneration facility operated by Minnesota Methane. The cogeneration plant is powered by methane piped from the Miramar Landfill and MBC digesters. Approximately 75 percent of the power produced is used for plant electrical needs with the remainder of the power sold to the local electric grid.