

Cronulla Wastewater Treatment Plant

Cronulla Wastewater Treatment Plant is one of 28 wastewater treatment and water recycling plants we operate in Sydney, the Blue Mountains and the Illawarra. Unlike many coastal plants, it treats wastewater to tertiary standard.

The plant has a 145 km² wastewater catchment, including Cronulla, Sutherland, Helensburgh, Menai, Bundeena and Maianbar. There is very little industry in the area.

Primary treatment

Step screens

Wastewater is passed through step screens to remove items such as paper, cotton tips and plastic.

About 200,000 people
live in the catchment

Aerated grit chamber

An aerated grit chamber causes grit to spiral to the bottom of the tank from where it is removed.

Sedimentation tanks

The wastewater flows to the sedimentation tanks where the solids settle to the bottom of the tanks. The solids are removed and transferred to the solids handling process. Oil and grease float to the top of the tank and are removed by scrapers.

Secondary treatment

Bioreactor

The wastewater flows to the bioreactor, which creates different environments for microorganisms to treat pollutants such as nutrients and organics in the wastewater.

Clarifiers

The wastewater flows to the clarifiers where more solids settle out and clear water flows on for tertiary treatment.

The plant produces much of its own energy from methane gas, using co-generation

Tertiary treatment

Dual media filter

The wastewater flows to a dual media filter made of sand and crushed coal. The filter traps the smallest particles and clear water flows through.

Ultraviolet disinfection

The treated wastewater is disinfected using ultraviolet light, before being discharged to the ocean at Potter Point.

Solids handling

Solids are collected from the sedimentation tank and the clarifier and fed into anaerobic digesters. These stabilise the solids and prevent odours. High speed centrifuges remove excess moisture.

The treated biosolids are now ready for beneficial re-use in agriculture, forestry, land rehabilitation and landscaping.

