

Water Reclamation - Hamilton Water Reclamation Plant

The Hamilton Water Reclamation Plant is located west of Hamilton and provides sewage treatment for residents and business customers in the Hamilton area.

The process begins with screening and grit removal, which removes any large items and rubbish. These items are collected and washed before being disposed.

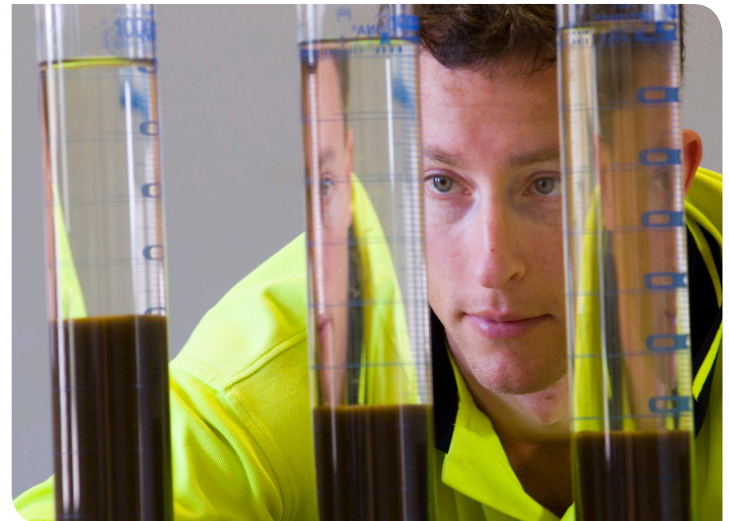
Sewage is then fed into a clarifier, where gravity helps solids fall to the bottom, forming sludge. The partially treated sewage is then pumped through trickling filters, which consist of coarse rock. This is a natural process where bacteria on the rock bed consume the organic pollutants to purify the water stream. The treated sewage then goes through a humus tank to further remove suspended solids before entering a primary lagoon.

The primary lagoon creates an environment where aerobic micro-organisms consume the organic matter, neutralising pollutants in the sewage, and assisting the treatment process.

After aeration, the water gravitates through a weir to the maturation lagoon to settle for 60 days. Further enhancement of the water, including the use of sunlight (UV rays) to kill pathogens, occurs to comply with Environment Protection Authority standards.

Recycled water is then used at a number of locations, including sporting facilities and local businesses.

From the clarifier, sludge is transferred to digester tanks, which help to break down the organic matter. It is then stabilised before being reused as soil conditioner.



Treating sewage at the Hamilton Water Reclamation Plant to comply with EPA standards

AT A GLANCE

Hamilton Water Reclamation Plant

2012/13 Volume Treated Sewage:	950ML
Number of Customers:	4,699
Storage Capacity:	4ML
Type of Treatment Used:	Maturation Ponds

IML = One Million Litres