

Leanyer Sanderson Waste Stabilisation Ponds Inlet Works Update



The \$16.2 million inlet works are 70% complete

Power and Water is dedicated to protecting people's health and enhancing the environment.

The Leanyer Sanderson Waste Stabilisation Ponds were constructed in 1972 and treat wastewater from 50,000 residents, schools and business in Darwin's northern suburbs and the Royal Darwin Hospital.

Construction began in July last year for the \$16.2 million inlet works upgrade to improve wastewater treatment and environmental outcomes at the facility.

The project is on schedule to be completed by November.

- Majority of the structural and civil works is completed.
- Majority of the pipework is installed.
- The high voltage line and transformer are installed.
- The odour control unit is being installed.
- Mechanical and electrical works have commenced.

Long-term benefits

We're committed to sustainable practices that protect and maintain the environment.

The project will restrict bathroom products from entering the treatment ponds. This means, in future, the sludge that accumulates at the bottom of the ponds will be free from gross pollutants, allowing it to be repurposed and used in agriculture, land rehabilitation, horticultural processes and mining.

The biosolids contained in the sludge are a by-product of the treatment process that are a rich source of phosphorus and nitrogen.



Improving our wastewater system

What inlet works do

Our wastewater treatment processes rely on natural biological methods to treat wastewater to an acceptable quality for discharge into Buffalo Creek.

Sewage contains varying quantities of floating and suspended solids, and also some other materials of considerable size such as unwanted bathroom products that should not be disposed of in household toilets.

The new inlet works provide Power and Water an opportunity to deliver better environmental outcomes for the community and reduce odour.

The result will be more efficient removal of the solid inorganic material such as nappy and facial wipes, sanitary pads, dental floss and cotton buds.

Wastewater received at the inlet works will be screened by a mechanical process to remove all large (greater than 5mm) non-biodegradable materials.

The inlet works will be covered and odours extracted and treated through biological and activated carbon filters.

The upgrade will ensure the capacity and performance of the ponds is improved to accommodate the immediate and long-term wastewater treatment requirements of Darwin's northern suburbs.

For more information visit powerwater.com.au/inlet.

Desludging works complete

Power and Water is always maintaining, repairing and upgrading the Leanyer Sanderson Waste Stabilisation Ponds to generate better outcomes for the environment and the community.

Desludging is a periodic maintenance process where treatment ponds are emptied, dried out and the biosolids are removed from the ponds to increase the efficiency and effectiveness of these facilities.

The drying out period can take up to two to three months.



Desludging of Sanderson primary pond is complete ahead of schedule



The upgrade project is being delivered jointly with BMD Construction

When the biosolids are dewatered they look much like garden soil.

Sanderson primary pond was taken offline in May to perform desludging works. The desludging works have been completed ahead of schedule.

Around 25,000 tonnes of sludge was extracted, limed and stored.

Sanderson primary pond is scheduled to be back online after the commissioning of the inlet works in November.

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