



COMMUNITY NEWSLETTER DECEMBER 2011

FARLEY WASTEWATER TREATMENT WORKS STAGE 3A UPGRADE



THE STAGE 3A UPGRADE TO THE FARLEY WASTEWATER TREATMENT WORKS (WWTW) IS ABOUT TO COMMENCE.

THIS NEWSLETTER PROVIDES AN OVERVIEW ON THE PROJECT AND EXPLAINS WHAT RESIDENTS CAN EXPECT DURING THE CONSTRUCTION PHASE OF THE PROJECT.

WHY IS FARLEY WWTW BEING UPGRADED?

The Farley WWTW is being upgraded to increase capacity to cater for projected growth and future recycling opportunities in the area, improve asset condition and ensure compliance with its Environmental Protection Licence.

Hunter Water will deliver the Stage 3 Upgrade in two phases with construction anticipated to commence on the Stage 3A Upgrade in January 2012. Construction will continue until late 2013. The cost of the Stage 3A Upgrade is \$29.5 million.

The second Stage 3B Upgrade is expected to be delivered in 2018, depending on growth within the catchment and recycling opportunities.

BENEFITS OF THE STAGE 3A UPGRADE

The key benefit of the Stage 3A Upgrade is that the plant will continue to be able to treat wastewater created by a growing population in the Maitland area and continue to meet the discharge quality requirements of the NSW Office of Environment and Heritage.

The Stage 3A Upgrade of Farley WWTW will result in a significant improvement in the quality of the effluent leaving the site, as the maturation ponds will be replaced by a new UV disinfection unit. This will eliminate the current algae issue caused by the existing maturation ponds.

A further benefit for the local community will be an improved odour control bio-filtration system. This will reduce odour levels in the vicinity of the plant.

WHAT IS BEING UPGRADED WITHIN THE PLANT?

Stage 3A works will include:

- Replacement of inlet works and odour control systems.
- Improved control of the aeration system.
- Provision of a common standby pump in the Returned Activated Sludge (RAS) pumping station.
- Decommissioning of Maturation Ponds 1 and 2 and installation of a new effluent discharge pipeline discharging directly into Fishery Creek.
- Conversion of part of the existing Maturation Pond 1 into a wet weather storage pond.
- Installation of a new Ultra-

FARLEY WASTEWATER TREATMENT PLANT STAGE 3A UPGRADE



Violet (UV) disinfection system to replace the maturation ponds.

- Provision of a new amenities building to replace the existing demountables, including an onsite car park.
- Associated electrical, instrumentation and communications systems.
- Site works, including access roads, landscaping, and site services around the upgraded site.
- Bunded hardstand for temporary centrifuge.
- New switchroom to house switchboards for new equipment.

WHAT TO EXPECT DURING CONSTRUCTION

The Stage 3A Upgrade will be undertaken by the Hunter Treatment Alliance, a joint venture between Hunter Water, Abigroup and CH2M HILL. The Hunter Treatment Alliance has recently completed significant upgrades of wastewater treatment works at Branxton, Paxton, Boulder Bay and Burwood Beach.

Hunter Treatment Alliance will commence work on the site on 9 January 2012. In the first weeks of construction you will notice construction sheds being delivered onto the site as well as the delivery and installation of the new amenities building.

During construction the main impacts that can be expected include:

- An increase in traffic to and from the plant. This will include construction workers vehicles and

trucks delivering materials to the site and taking excess materials away.

- An increase in noise. This will generally be typical construction noise related to the operation of machinery such as excavators. At times noisier equipment such as rock-breakers may be needed but this will be for short durations.
- Minor impacts on visual amenity. Those who can see the plant will notice a lot of construction related equipment as well as earthworks on site.

We will endeavour to minimise construction related impacts during the life of the upgrade and will work with local residents and other key stakeholders to keep them informed during this critical phase.

We will let our neighbours know if there are any works expected that will result in an increase in noise from the site prior to the work commencing.

Construction hours will normally be Monday to Friday 7am to 6pm and 8am to 1pm on Saturday. The community will receive notification on any proposed works required outside of these hours.

WHAT TO EXPECT AFTER CONSTRUCTION

Once construction of the upgrade is complete there will be few visual changes at the plant. The plant site will have additional structures but these will be similar in nature to the existing buildings and infrastructure.

The existing two maturation ponds will remain however the large maturation pond to the east of the plant will no longer be utilised on an ongoing basis and will only be utilised for wet weather storage.

Some landscaping will occur to provide increased screening to the site to improve the visual amenity of the plant in the future.

The Stage 3B Upgrade, expected to commence in 2018 will include:

- further expansion of capacity
- transition to an enhanced biological phosphorous removal treatment process reducing the reliance on chemical dosing
- construction of a recycled water plant to supply the Gillieston Heights dual reticulation scheme
- implementation of an aerobic digester for treating waste sludge from the biological treatment process.

FOR MORE INFORMATION

Hunter Water will keep the community informed as the project progresses. If you would like further information on the Farley WWTW upgrade visit www.hunterwater.com.au or call the Hunter Treatment Alliance community enquiries line on (02) 49135644.