

# BRIEFING NOTE

## Chelson Meadow Landfill Closure Plan & Leachate Treatment Plant Upgrade

Following the closure of the landfill facility the site has been profiled, capped and restored. The final piece of the programme is ensure the final stages of management by the authority is completed to satisfaction in-line with the Environment Agency. A landfill closure plan which will dictate how the site will be monitored and maintained for the next 60 or 70 years to ensure the safety of the surrounding environment has to be completed and then maintained.

The main areas of investment are in preventing the migration of landfill gas and leachate from the site in order to prevent a serious pollution incident to the surrounding environment, which includes the Plym Estuary (this is directly linked to the European Marine Site and bathing waters), National Trust land (including agricultural land) and a large scale new housing development. These types of pollution incident carry potentially severe financial penalties and investigations from the Environment Agency therefore small scale capital spending in this area is considered to be a significant investment in the way Plymouth manages its waste legacy and ensures it minimises the risk of pollution events and nuisance caused to new local residents.

It is a statutory requirement to provide a closure plan. The council has been proactive in investing in condition surveys and studies by industry experts and these have identified certain works that need to be undertaken in order to meet the requirements of the closure plan.

On-site gas and leachate boreholes are required to manage the gas field and in-site leachate levels, although the effect of reducing the leachate level will be to generate more landfill gas in the short-term which is captured by a partner contractor in order to create electricity which is sold to the national grid for which we receive royalty payments.

Parts of the Leachate Treatment Plant which collects all of the leachate produced by the waste that has been landfilled have been in operation 24/7 for the last 23 years and despite regular maintenance the blower units (which aerates the leachate as part of the treatment process) are considered to be a statutory noise nuisance after assessment which is now considered an issue by the Environment Agency in light of the close proximity to the site of the new housing development being built adjacent to the site.

The joint local plan identifies this site as a countryside park, but this cannot take place until the results of regular monitoring indicate that gas and leachate production has ceased, but this cannot happen if the infrastructure identified is not put in place.

To replace the blower units on the leachate treatment plant and install both on-site and off-site gas and leachate boreholes to complete the closure plan and meet statutory requirements.

- Undertaking this work will, in the short-term (7-8 years) protect the profiled revenue obtained via the sale of electricity generated by landfill gas.
- Undertaking this work will reduce noise and complaints from local residents through the more efficient blower units.

Capital investment money has previously been used to cap and restore the landfill site as part of Plymouth's need to manage its waste legacy appropriately and for future generations and this is the final part of the programme.

The project meets the Growing Plymouth theme of creating a green & pleasant city as once completed the site will be open as green space to be enjoyed by residents of and visitors to Plymouth.

Completion of the project will mean that Plymouth have met its environmental responsibilities by returning a 200 acre meadow land that had been used as a land fill facility to the benefit of the city back into a green space that can be enjoyed by everyone. The site and its waste management licence was transferred to Plymouth City Council in 1998 when Unitary Authority status was granted, Plymouth City Council assumed the responsibility and legal obligation to complete this work.

This project enables the investment in the local authority's waste and recycling infrastructure and ability to be compliant with its environmental permits and licencing. Therefore it enables the avoidance of potential EA related fines.

The project will be delivered in accordance with the agreed closure plan and improvement notice issued by the Environment Agency. These investments into the facilities will future proof the site, allow for commercial activities to continue at Chelson Meadow and continue to deliver our statutory requirements whilst being in accordance with the local authority environmental permits.