



## ▣ CLIENT OVERVIEW

Onyx is a world leader in waste management and serves 270,000 industrial and tertiary sector customers in 33 countries. Its services include the collection, treatment and recycling of solid and liquid waste for both local authorities and industrial clients.

Onyx manages numerous disposal and treatment sites in mainland Britain to the highest environmental standards ensuring safe disposal and legislative compliance.

## ▣ CLIENT'S REQUIREMENTS

Onyx's main objectives were to implement a suitable leachate treatment facility to meet discharge consent to sewer in respect of pesticides, ammonia and methane, minimise environmental impacts and optimise leachate monitoring.

## ▣ OUR SOLUTION

VWIO designed and installed a completely new leachate treatment plant at their site near Telford. VWIO owns this facility and will be operating and maintaining it for the next 15 years.

The plant operates under automatic control at a flow rate of up to 300m<sup>3</sup>/day of differing raw leachate sources with a daily ammoniacal nitrogen output limited to no more than 50 kg/day.

The different phases of treatment includes:

- pH control and adjustment
- Dual media filtration for the removal of particulates
- Adsorption of pesticides using Granular Activated Carbon
- Ammonia and methane thermal stripping and destruction via a flare and catalytic unit

The treated leachate is then metered and analysed so that it meets the environmental requirements prior to discharge to sewer under the terms of a consent between Onyx and the local sewerage company.

▣ I was pleased to find in house expertise to fulfil our requirements. We have successfully worked together for the past two years to overcome the difficulties of combining all the treatment options mentioned above. The next phase of development will be to use power from the gas generation to treat the leachate and to negate the problems with emissions<sup>22</sup>

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