

Company Name:	Tradebe (Gwent) Ltd		
Facility Name:	Gwent Waste Management Centre		
Facility Address:	Corporation Road Newport South Wales NP19 4RD		
Permit Number:	SP3531SK	Issue Date:	26/06/06
Variation Notice:	EA/EPR/SP3531SK/V007a	Issue Date:	27/04/15
Activity Performance Report:	01/01/19 – 31/12/19		

a. Review of Monitoring Results

The following measures are monitored on a routine basis as a requirement of the permit. (These do not constitute a complete list of all the monitoring carried out as part of management of the site).

i. Trade Effluent Discharges

Trade Effluent generated by the treatment process is directed into two settlement tanks prior to overflow into the onsite drain for discharge into the local sewer. The Trade Effluent is discharged through a Siemens Magflo meter, which records the instantaneous flow rate (m³/hr-1), and the cumulative total flow (m³) and an Aquamatic auto sampler which takes a flow-proportional composite sample over the discharge period (24 hrs). The composite sample is analysed in house once per weekday when effluent is discharged. The composite sample is also sampled weekly by Welsh Water.

NRW report S1 records the high/low analytical results in each quarter and have been submitted to EA through 2019.

Total effluent produced: 85,023 m³-
Effluent produced per unit: 0.879m³ / te

The effluent discharge monitoring and management systems achieved MCERTs re-certification on 18th April 2019 with follow up audit scheduled for April 2020. The Magflo meter is included in our site PPMS system, and receives a monthly site verification and annual service from an outside contractor.

We have completed both lab and pilot plant trials aimed at further improving the quality of the effluent, in terms of metal and anion removal. We now have a proposal for a new effluent treatment plant which is currently in the design stage.

We have undertaken significant work on the up keep of the site drain system, through which the trade effluent is discharged. The lines have been ultra high pressure jetted and the rear lateral, leading to out boundary line has been replaced. CCTV survey will complete the work in early 2020.

ii. Site Scrubber Monitoring

The site has three scrubbers that are checked on a daily basis for both alkalinity/acidity and pH and this is used to monitor performance. The results are reported for review at the daily morning meetings and also reported to NRW every six months as a permit requirement via form SC1.

All three site scrubbers were inspected by an external contractor and all recommendations/actions were noted and captured on the site work requisition system for the remedial work to be carried out.

iii. Waste Inputs and Outputs

Waste inputs and outputs are monitored and tracked using SAP that is the system of choice used by Tradebe across all facilities in all countries. It is a fully integrated system and controls waste enquiries, inputs, stock, financial data and analysis from cradle to grave. Reports of waste inputs and outputs are compiled and submitted to NRW as the site returns on a quarterly basis. In summary:

For 2019

Inputs	Hazardous (te)	Non-Hazardous (te)
Treatment Plant	57,770	34,054
Transfer Station	3830	1270
Outputs		
Third Party Disposal	4,396	14,514
Landfill	565	13,244

Quantities are measured by means of the site weighbridge, which is calibrated annually by an external contractor. In 2019 this was carried out in September.

iv. Filtercake Outputs

Filtercake is produced in batches from the treatment process that is the site's single largest solid output. The ratio of tonnes filtercake produced per tonne of waste treated is a good indicator of both operational and environmental efficiency but is variable dependent upon the types of waste being treated e.g. metal salt, sulphate, phosphate rich wastes will produce more filtercake when compared to landfill leachates or other less-contaminated effluents. The ratio for the last few years is given in the table below and 0.25 is considered an ideal figure:

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019
te filtercake/tonne waste	0.29	0.29	0.23	0.27	0.26	0.22	0.16	0.14	0.14

2019 continued with the trend of the previous 2 year with increases in the volume of wastes that had low solids coupled with more caustic waste streams that required less lime for neutralisation. This means that proportionally less filter cake was produced per tonne of waste that accounts for the ongoing reduction in te filtercake/tonne waste above for 2019.

b. Annual Improvement Targets (from Management System)

During the 2019 several projects were undertaken to improve different aspects of the site.

A pilot plant was installed, commissioned and run, providing scaled up data from bench trials on effluent quality improvements. The trials were successful and proposals for a full-scale effluent plant and being looked at in 2020.

The acid offloading system has seen some improvement with the installation of a more efficient pump and a reconfiguration of the pipework to also improve efficiency. A stripping pump has been installed to minimise spillage when decoupling from the system.

Both caustic offloading systems have been upgraded with overfill protection.

A storage area has been created for containerised waste exiting site, this allows better segregation of wastes.

The incoming load area layout has been changed to incorporating 5m separation between offloading bays to improve segregation.

An oxidiser storage cabinet has been purchased to move oxidisers out of the transfer station and into isolation. This has allowed for further segregation in the transfer station by freeing up a bay.

c. Annual Production / Treatment Data

The data required by table S5.2 of the site Permit has been reported to NRW on form PI1 in Jan 17. In addition, waste returns are submitted to NRW on a quarterly basis in an electronic format. The data submitted therein was:

Total waste received	96,672 te
Treatment residues disposed to non-hazardous landfill	13,244 te
Treatment residues disposed to hazardous landfill	565 te

d. Performance Parameters

As stated in section (c) above, form PI1 was submitted to NRW for the reporting period. The environmental performance indicators given on this form are:

Effluent discharged to sewer	85,023	m ³
Water used	13,00	m ³
Non-hazardous waste sent out	14,514	te
Hazardous waste sent out	4,396	te

e. Site Contamination / Decontamination Notes

No contamination events occurred within 2019

Alex Morris
GWMC Assistant Site Manager
16 Jan 20