

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/V008	Issue Date:	19/08/19
Activity Performance Report:	01/01/20 – 31/12/20		

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 ($\text{m}^3/\text{hr}^{-1}$), the cumulative total flow (m^3) 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 NRW through 2020.

Total effluent produced: 45,086 m^3
 Effluent produced per unit: 0.680 m^3 / te

The total effluent produced, measured by the flowmeter, was as above (45,068 m^3), however due to a blocked sewer 7567 m^3 of effluent was disposed of as waste at a third party waste management site, the additional volume would alter the effluent produced per unit to 0.764 m^3 / te.

The effluent discharge monitoring and management systems achieved MCERTs re-certification on 10th May 2017 with most recent audit undertaken 21st Oct 2020. The Magflo meter is included in our site PPMS system, and receives an annual third-party verification and annual service from an outside contractor.

The effluent treatment plant project has progressed into the design phase with an aim of having completed plant design by the end of 2021 ready for install and commissioning to commence in Q1 of 2022.

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.

iii. Waste Inputs and Outputs

Waste inputs and outputs are monitored and tracked using SAP which 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 2020

Inputs	Hazardous (te)	Non-Hazardous (te)
Treatment Plant	46,705	19,596
Transfer Station	4366	486
Outputs		
Third Party Disposal	2,229	12,435
Landfill	307	10,999

Quantities are measured by means of the site weighbridge, which is calibrated annually by an external contractor. In 2020 this was carried out in April.

iv. Filtercake Outputs

Filtercake is produced in batches from the treatment process, which 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	2012	2013	2014	2015	2016	2017	2018	2019	2020
te filtercake/tonne waste	0.29	0.23	0.27	0.26	0.22	0.16	0.14	0.14	0.17

2020 continued with the trend of the previous 3 years with increases in the volume of wastes that had low solids coupled with more caustic waste streams that required less lime for neutralisation and stricter controls on coagulant usage, resulting in proportionally less filter cake produced per tonne of waste. This accounts for the ongoing reduction of te filtercake/tonne waste through 2020.

b. Annual Improvement Targets (from Management System)

In 2020 site continued to work on the design of the new effluent plant with a target for installation and commission in Q1 of 2022.

Water recovery was recognised on site with the potential of saving around 28,000m³ of potable water in 2021. Design started on a tanker wash out facility which will reduce the carbon footprint of vehicles that use it, whilst utilising recovered water generated on site.

At the rear of the site on a large grass bank area, site planted its first wild plant and flower area, the area has been seeded with plants identified as being helpful in attracting and sustaining various insects.

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 21. In addition, waste returns are submitted to NRW on a quarterly basis in an electronic format. The data submitted therein was:

Total waste received	66,301 te
Treatment residues disposed to non-hazardous landfill	10,999 te
Treatment residues disposed to hazardous landfill	307 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	45,086	m ³
Water used	11,000	m ³
Non-hazardous waste sent out	12,435	te
Hazardous waste sent out	2,229	te

e. Site Contamination / Decontamination Notes

No contamination events occurred within 2020

Alex Morris
GWMC Site Manager
26 Jan 21