SOFIDEL
Sofidel UK Ltd - Baglan

PERFORMANCE REVIEW FOR SOFIDEL UK BAGLAN 2020

As required by permit condition 4.2.2, a report must be submitted on the performance in 2020. This will take into account energy, water, waste and performance parameters.

ENERGY AND WATER

Sofidel UK Baglan is committed to reducing the amount of energy used on site from both an environmental and financial perspective. Targets are set yearly by the parent company. The consumption is closely monitored to ensure that these targets are met. To calculate the energy used per tonne of paper produced, the production used is based on the BREF definition – 'saleable production after the tissue machine before any rewinding processes and excluding any core'.

Electricity

Year	kwh/tonne
2019	722
2020	720

The electricity consumed per tonne of paper produced decreased by 0.3%.

Gas

Year	Sm^3/tonne
2019	168
2020	168

The gas consumption has remained the same. Gas usage is expected to decrease in 2021 due to replacement of damaged de-gasser.

Raw water used

Year	m^3/tonne
2019	4.89
2020	4.98

The overall water consumption increased by 1.8%. 22.9% of the total water used is from rainwater harvesting, compared to 15.4% contribution from rainwater in 2019.

Effluent water discharged

Year	m^3/tonne
2019	2.49
2020	2.45

The effluent discharged decreased by 1.6%. The discharge is below the yearly average of 3.5-20 m^3/t currently described in the BREF document.

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PERFORMANCE PARAMETERS EMISSIONS

The average values for these parameters can be seen below along with the average range listed in the BAT.

PARAMETER	SOFIDEL UK BAGLAN AVERAGE VALUES 2019	SOFIDEL UK BAGLAN AVERAGE VALUES 2020	BAT YEARLY AVERAGE kg/T
COD	0.3161 Kg/t	0.3761 Kg/t	0.15-1.5 Kg/t
Suspended Solids	0.0546 Kg/t	0.0832 Kg/t	0.02-0.35 Kg/t
Total Nitrogen	0.0183 Kg/t	0.0235 Kg/t	0.01-0.15 Kg/t
Total Phosphorous	0.0046 Kg/t	0.0071 Kg/t	0.003-0.012 Kg/t
Adsorbable organically bound halides (AOX)	0.0007 Kg/t	0.0005 Kg/t	0.05 Kg/t
BOD	0.0139 Kg/t	0.0148 Kg/t	N/A
CO_2	0.3383 t/t	0.3342 t/t	N/A
NO_x	0.0002 t/t	0.0002 t/t	N/A

There has been a slight increase in the 2020 water parameters average values for the majority of the parameters. The values are still within the recommended yearly averages for the listed parameters and are compliant with the recommended BAT-AELs. The data has been calculated using the BREF definition for production.

The amount of CO_2 emitted in 2020 was 22093 tonnes. There was an increase of 1.7% in the actual emissions compared to 2019. The amount of NO_x emission rate over the last two years has remained the same.

PRIORITY HAZARDOUS SUBSTANCE SCREEN

The annual monitoring was undertaken for Priority Hazardous Substances. All results came back as below the reporting limit of the laboratory used. Due to the closure of labs for COVID-19 the test methods were performed by accredited laboratories but the accreditation did not cover the matrix "Trade effluent to controlled waters". Our Regulatory Officer was made aware of this issue and a Schedule 5 has been submitted.

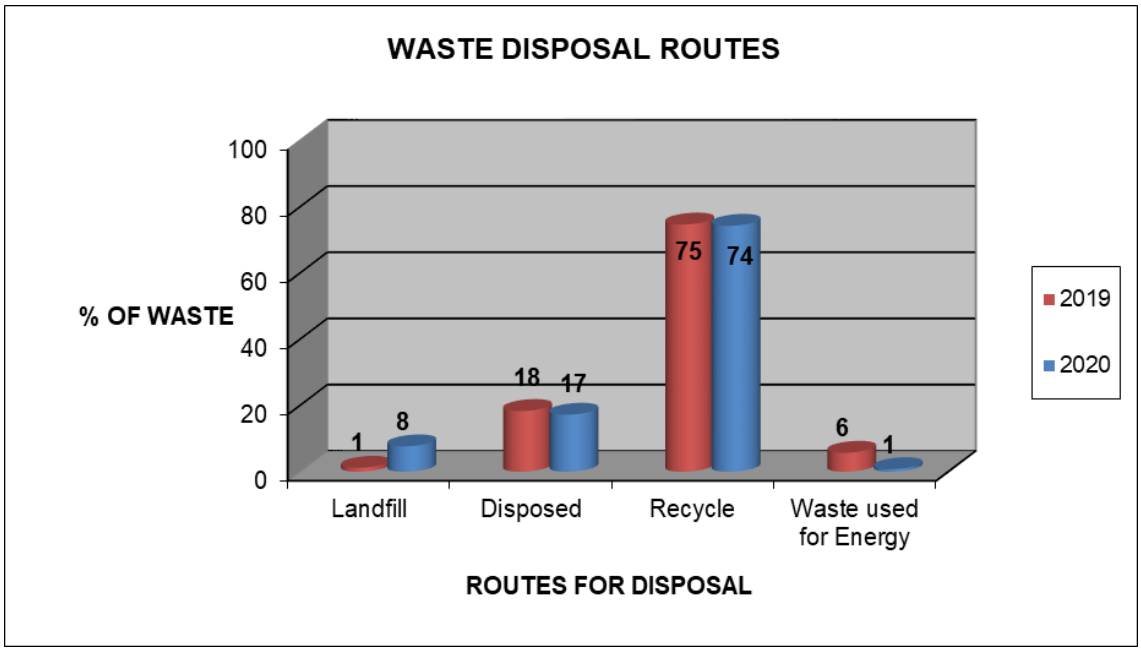
Emission Point	Substance / Parameter	Emission Limit Value	Result
W1	Tributyl Tin	No limit set	<0.2 ug/l
W1	Anthracene	No limit set	<0.1 ug/l
W1	alpha-Endosulphan	No limit set	<0.0004 ug/l
W1	beta-Endosulphan	No limit set	<0.0004 ug/l
W1	Brominated diphenyl ether	No limit set	<0.001 ug/l
W1	C10-C13 Chloroalkanes	No limit set	<1 ug/l
W1	Hexachlorobenzene	No limit set	<0.0005 ug/l
W1	Hexachlorobutadiene	No limit set	<0.002 ug/l
W1	Hexachloro-cyclohexane	No limit set	<0.002ug/l
W1	Nonylphenol	No limit set	<0.01 ug/l
W1	Pentachlorobenzene	No limit set	<0.0005 ug/l
W1	Polycyclic aromatic Hydrocarbons (PAHs)	No limit set	<1 ug/l

PERMIT BREACHES

Only issue in 2020 was the problem with using non-accredited methods to analyse the trade effluent for the Priority Hazardous Substances Screen.

WASTE

Sofidel UK Baglan is committed to reducing the amount of waste that goes to landfill and monitors the waste on site closely. Below can be seen the waste figures for the amount of waste produced in both 2019 and 2020 and a comparison of these figures.



The waste removed from site has been split down into four disposal routes- landfill, recycled, waste to energy and disposed. The landfill waste is composed of hazardous waste which has been removed from site and cannot be recycled, and also general waste. The percentage of waste to landfill increased in 2020 as the waste contractor used did not fully divert the general waste for recycling and waste to energy due to COVID. Alternate waste contractors are currently being investigated for decreasing the amount of waste to landfill in 2021.

The recycled waste consists of cardboard, poly, wood, metal, empty IBCs, sludge and hazardous waste which could be recycled. The waste to energy is a portion of general waste which was sent to energy recovery facility. The disposed waste is the ink and glue washings which are processed at a water treatment site and then discharged to surface water.

Overall the amount of waste produced on site has decreased by 7.7% compared with 2019. An environmental objective was set in 2020 for the reduction of plastic packaging on finished products. This is currently an ongoing product.

Sofidel UK Baglan is committed to reducing the amount of waste sent to landfill as well as the amount of waste generated on site. We apply the waste hierarchy to all waste streams on site and in 2021 will focus on maintaining recycling and further reducing waste production on site.

ISO 14001 AUDITS

There were no non-conformities raised during the ISO 14001 audits that took place in 2020.

ISO 50001 AUDITS

The re-certification audit took place in March 2020. There were no non-conformities raised during the ISO 50001 audit that took place in 2020.

PROJECTS

In 2020, a number of projects have been undertaken/started at Sofidel UK Baglan. These include:

- The installation of the new de-aerator on the boiler – *Update - completed during shutdown*
- Upgrade of the Paper mill DCS system – *Complete in 2021*
- Installation of variable speed drives in the paper mill – *Update – postponed to 2021*
- Installation of additional energy meters – *Update – postponed to 2021*
- Recertification of ISO 50001 to new 2018 standard – *Update – completed*
- Installation of new drives on the dust extraction system in converting- *Update – postponed to 2021*

In 2021, a number of projects will be started/ continued. These include:

- Installation of variable speed drives in the paper mill
- Installation of additional energy meters
- Installation of new drives on the dust extraction system in converting
- Recertification of ISO 14001 certificate
- Upgrade on boiler to improve efficiency

CONCLUSION

During a difficult year in regards to the Covid pandemic, Sofidel UK Baglan has continued to perform energy efficiently and also to remain focused on the amount of water consumed. Unfortunately, we were unable to achieve our gas target in 2020 which was set by Corporate but aim to rectify this is 2021. New energy, gas and water targets have been set for Sofidel UK Baglan for 2021 and these are linked in with the objectives and targets which are part of our ISO14001 and ISO 50001 management system. The monitoring data shows that Sofidel UK Baglan emissions are well within the levels set within the BREF document.