

Permit Reference Number: BX8289IW

Operator: Princes Ltd

Installation: Princes Soft Drinks - Cardiff

Form Number: M1

Reporting of Mass release to sewer for the period from ...1<sup>st</sup> January 2020.....to...31<sup>st</sup> Dec 2020.....

Emission Point	Substance / Parameter	Annual Limit Value g	Result <sup>[1]</sup>
S1	Cadmium (and its compounds as Cd)	0.5	0.0979
S1	Mercury and its compounds as Hg	1.5	0.283

[1] The result given is calculated using a mass balance. See Permit condition 6.1.1

Cadmium and Mercury values have decreased as we have changed Caustic supply from Holchem Caustak 30 to Ecolab MIP C and the theoretical quantities are lot lower.

Signed ..... ..Victoria Gilbert & Andrew Earley.....

Date.....29/01/2021 .....

(Authorised to sign as representative of the Operator)

Permit Reference Number: BX8289IW

Operator: Princes Ltd

Installation: Princes Soft Drinks - Cardiff

Form Number: R1

Reporting of Waste Disposal and Recovery for the year .....2020.....

Waste Description	Disposal Route	Tonnes	Recovery Tonnes
1) Hazardous Waste	Recycled	0.45	0.45
2) Non-Hazardous Waste	Recycled	1418.8	1418.8
<b>TOTAL WASTE</b>	<b>Recycled</b>	<b>1419.25</b>	<b>1419.25</b>

Year	Parameter Hazardous waste (t)	Non hazardous waste (t) /	Total waste (t)
2009	0.83	1312.5	1313.37
2010	2.49	843.66	846.15
2011	0.074	832.81	832.88
2012	28.511	1260.3	1288.79
2013	0.631	1015.16	1015.79
2014	0.418	743.72	744.14
2015	0.98	306.019	306.999
2016	9.75	1281.52	1291.266
2017	3.405	347.03	350.435
2018	3.61	365.91	369.52
2019	2.613	1591.5	1594.1
2020	0.45	1418.8	1419.25

**Operator's comments:** During 2020 the new GEA process equipment was commissioned and supply was changed from the Tetra process to the SIG fillers. Tetra fillers have now been decommissioned and we are working on improving our usage of our new equipment. We are now working on Phase 2 of the project will see the introduction of additional new production lines which will increase both production volumes and also waste but increase production.

Signed ..... ..Victoria Gilbert & Andrew Earley.....  
 (Authorised to sign as representative of the Operator)

Date.....29/01/2021 .....

Permit Reference Number: BX8289IW

Operator: Princes Ltd

Installation: Princes Soft Drinks - Cardiff

Form Number: WU1

Reporting of Water Usage for the year .....2020.....

Water Source	Usage (m <sup>3</sup> )	Specific Usage (m <sup>3</sup> / m <sup>3</sup> )
Mains water	138773	1.123
<b>TOTAL WATER USAGE</b>	<b>138773</b>	<b>1.123</b>

Trends in Water Usage			
Year	Parameter Named Water source	Total Water usage m3	Water / finished product (m <sup>3</sup> )
2015		176707	1.354
2016		145988	1.327
2017		168132	1.467
2018		157533	1.299
2019		175092	1.559
2020		138773	1.123

Operator's comments: .

Signed .....Victoria Gilbert & Andrew Earley.....

Date.....29/01/2021 .....

(authorised to sign as representative of the Operator)

Permit Reference Number: BX8289IW

Operator: Princes Ltd

Installation: Princes Soft Drinks - Cardiff

Form Number: E1

Reporting of Energy Usage for the year .....2020.....

Energy Source	Energy Usage		
	Quantity	Primary Energy (MWh)	CO <sub>2</sub> Produced (tonnes)
Electricity *	MWh	10123.3	1680.5
Natural Gas	MWh	5001.6	949.7
<b>TOTAL</b>	<b>MWh</b>	<b>15124.9</b>	<b>2630</b>

Year	Trends in Energy Usage		
	Parameter Primary Energy usage	CO <sub>2</sub> produced	CO <sub>2</sub> / finished product (t)
2012	15431	2718	0.039
2013	16795	2951	0.017
2014	16885	2961	0.018
2015	9758	2632	0.022
2016	10221	2671	0.024
2017	10254	2781	0.02468
2018	7914	2277	0.01878
<b>2019</b>	<b>13106</b>	<b>2236</b>	<b>0.0199</b>
<b>2020</b>	<b>15124.9</b>	<b>2630</b>	<b>0.0213</b>

\* Conversion factor for delivered electricity to primary energy =delivered electricity to primary multiply by 2.4 (from 2010)  
delivered electricity in kWh to kg CO<sub>2</sub> multiply by 0.166

Operator's comments:

Signed .....Victoria Gilbert & Andrew Earley.....

Date.....29/01/2021 .....

(Authorised to sign as representative of the Operator)

Permit Reference Number: BX8289IW

Operator: Princes Ltd

Installation: Princes Soft Drinks - Cardiff

Form Number: PI1

Reporting of Performance Indicators for the year .....2020.....

Annual Production/m3	
Fruit Juices	123621

Environmental Performance Indicators

Parameter	Annual Average	Units
Specific water use	1.123	m3/m3 ratio
Specific waste production	11.48	kg/m3
Specific energy use	440.454	MJ/m3

Trends in Environmental Performance				
Year	Parameter	Water use (m <sup>3</sup> ) / m <sup>3</sup> of finished product	Waste kg/ m <sup>3</sup> of finished product	Energy (MWh/finished product )
2016		1.33	9.2259	494.96
2017		1.467	3.058	498.038
2018		1.299	3.048	389.32
2019		1.559	4.094	419.97
2020		1.123	11.48	122.35

Operator's comments:

Signed .....Victoria Gilbert & Andrew Earley.....

Date.....29/01/2021 .....

(Authorised to sign as representative of the Operator)

Permit Reference Number BX8289IW

Operator: Princes Ltd

Installation: Princes Soft Drinks – Cardiff

Form Number S1

Reporting Emissions to Sewer for the period .....1<sup>st</sup> January 2020....to.....to...31st Dec 2020.....

Emission Point	Substance/parameter	Emission Limit value(1)	Result
S1	COD	None set	5324.7
S1	pH	None set	6.41
S1	Suspended Solids	None set	119.55
S1	Effluent Flow	None set	62475
S1	Cadmium and its compounds as Cd	0.01mg/l	0.0000016
S1	Mercury and its compounds as Hg	0.1µg/l	0.00452

(1) The emission limit values for mercury and cadmium are expressed as annual averages calculated by mass balance. See permit condition 6.1.1

Signed .....Victoria Gilbert & Andrew Earley.....  
(Authorised to sign as representative of the Operator)

Date.....29/01/2021 .....