

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 ...1st January 2021.....to...31st Dec 2021.....

Emission Point	Substance / Parameter	Annual Limit Value g	Result ^[1]
S1	Cadmium (and its compounds as Cd	0.5	0.01
S1	Mercury and its compounds as Hg	1.5	0.035

[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.

SignedJohn O'Malley & Craig Wheeler.....

Date.....28/01/2022

(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 year2021.....

Waste Description	Disposal Route	Tonnes	Recovery Tonnes
1) Hazardous Waste	Recycled	0.76	
2) Non-Hazardous Waste	Recycled	2937.24	
TOTAL WASTE	Recycled	2937.24	

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
2021	0.76	2937.24	2938.435

Operator's comments: During 2021 the year has seen an increase in total waste because of the implementation of the phase 2 line 4,5,7,8,9,10 and with new line 6 in 2022 the waste will increase but will steady of at a constant number.

Signed John O'Malley & Craig Wheeler.....
(Authorised to sign as representative of the Operator)

Date.....28/01/2022

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Installation: Princes Soft Drinks - Cardiff

Form Number: WU1

Reporting of Water Usage for the year2021.....

Water Source	Usage (m ³)	Specific Usage (m ³ / m ³)
Mains water	285155	2.041
TOTAL WATER USAGE	285155	2.041

Year	Parameter Named Water source	Total Water usage m3	Water / finished product (m ³)
2015		176707	1.354
2016		145988	1.327
2017		168132	1.467
2018		157533	1.299
2019		175092	1.559
2020		138773	1.123
2021		285155	2.041

Operator's comments: . During 2021 the year has seen an increase in total water because of the implementation of the phase 2 line 4,5,7,8,9,10 and with new line 6 in 2022 the energy will increase but will steady of at a constant number.

SignedJohn O'Malley & Craig Wheeler.....

Date.....28/01/2022

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Form Number: E1

Reporting of Energy Usage for the year2021.....

Energy Source	Energy Usage		
	Quantity	Primary Energy (MWh)	CO ₂ Produced (tonnes)
Electricity *	MWh	9211.126	3.669
Natural Gas	MWh	9292.799	1.840
TOTAL	MWh	18503.925	5.510

Trends in Energy Usage			
Year	Parameter	CO ₂ Produced (Kg)	CO ₂ / finished product (t)
	Primary Energy usage		
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
2019	13106	2236	0.0199
2020	15124.9	2630	0.0213
2021	18503.925	5510	0.0250

* Conversion factor for delivered electricity to primary energy =delivered electricity to primary multiply by 2.4 (from 2010)
delivered electricity in kWh to kg CO₂ multiply by 0.166

Operator's comments: During 2021 the year has seen an increase in total energy because of the implementation of the phase 2 line 4,5,7,8,9,10 and with new line 6 in 2022 the energy will increase but will steady of at a constant number.

SignedJohn O'Malley & Craig Wheeler.....

Date.....28/01/2022

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Form Number: PI1

Reporting of Performance Indicators for the year2021.....

Annual Production/m3	
Fruit Juices	139687

Environmental Performance Indicators

Parameter	Annual Average	Units
Specific water use	2.306	m3/m3 ratio
Specific waste production	23.77	kg/m3
Specific energy use	2306.67	MJ/m3

Trends in Environmental Performance			
Year	Parameter		
	Water use (m ³) / m ³ of finished product	Waste kg/ m ³ 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
2021	2.306	23.77	2306.67

Operator's comments:

SignedJohn O'Malley & Craig Wheeler.....

Date.....28/01/2022

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Form Number S1

Reporting Emissions to Sewer for the period1st January 2021....to.....to...31st Dec 2021.....

Emission Point	Substance/parameter	Emission Limit value(1)	Result
S1	COD	None set	7014
S1	pH	None set	7.518
S1	Suspended Solids	None set	78.727
S1	Effluent Flow	None set	64672
S1	Cadmium and its compounds as Cd	0.01mg/l	0.01
S1	Mercury and its compounds as Hg	0.1µg/l	0.035

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

SignedJohn O'Malley & Craig Wheeler.....
(Authorised to sign as representative of the Operator)

Date.....28/01/2022