

Permit Reference Number: UP3237CP

Operator: Solway Foods Ltd

Installation: Rogerstone Park

Form Number: A1

Reporting of Emissions to Air for the period from Jan 1st 2019.....to...Dec 31st 2019

Emission Point	Substance / Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
A1	NOx	----	4.29 mg/m ³	BS EN 14792:2017	21/11/2019 11:30 – 12:30	UKAS/MCERTS	3%
A1	CO	----	2.00 mg/m ³	BS EN 15058:2017		UKAS/MCERTS	3%
A1	Particulates	----	<0.43 mg/m ³	BS EN 13284-1: 2002	21/11/2019 11:34 – 12:34	UKAS/MCERTS	56%
A2	NOx	----	90.91 mg/m ³	BS EN 14792:2017	19/11/19 14:30 – 15:30	UKAS/MCERTS	3%
A2	CO	----	2.1 mg/m ³	BS EN 15058:2017		UKAS/MCERTS	4%
A2	Particulates	----	<0.96 mg/m ³	BS EN 13284-1: 2017	19/11/19 14:42 – 15:44	UKAS/MCERTS	56%
A3	NOx	----	146.84 mg/m ³	BS EN 14792:2017	19/11/19 12:50 – 13:50	UKAS/MCERTS	3%
A3	CO	----	0.71 mg/m ³	BS EN 15058:2017		UKAS/MCERTS	4%
A3	Particulates	----	<0.51 mg/m ³	BS EN 13284-1: 2017	19/11/19 12:55 – 13:55	UKAS/MCERTS	56%
A4	NOx	----	111.48 mg/m ³	BS EN 14792:2017	19/11/19 11:10 – 12:10	UKAS/MCERTS	3%
A4	CO	----	0.45 mg/m ³	BS EN 15058:2017		UKAS/MCERTS	4%
A4	Particulates	----	<0.82 mg/m ³	BS EN 13284-1: 2017	19/11/19 11:10 – 12:10	UKAS/MCERTS	100%
A6	NOx	----	11.29 mg/m ³	BS EN 14792:2017	20/11/19 15:49 – 16:49	UKAS/MCERTS	3%
A6	CO	----	36.47 mg/m ³	BS EN 15058:2017		UKAS/MCERTS	4%
A6	Particulates	----	<0.48 mg/m ³	BS EN 13284-1: 2017	20/11/19 15:57 – 16:57	UKAS/MCERTS	56%
A8 LHS	NOx	----	248.97 mg/m ³	BS EN 14792:2017	18/11/19 12:12 – 13:12	UKAS/MCERTS	3%
A8 LHS	CO	----	3.38 mg/m ³	BS EN 15058:2017		UKAS/MCERTS	5%
A8 LHS	Particulates	----	<1.37 mg/m ³	BS EN 13284-1: 2017	18/11/19 12:12 – 13:14	UKAS/MCERTS	56%
A9	NOx	----	202.01 mg/m ³	BS EN 14792:2017	18/11/19 14:49 – 15:49	UKAS/MCERTS	3%
A9	CO	----	17.34 mg/m ³	BS EN 15058:2017		UKAS/MCERTS	5%
A9	Particulates	----	<4.25 mg/m ³	BS EN 13284-1: 2017	18/11/19 14:49 – 15:51	UKAS/MCERTS	100%
A10	NOx	----	196.70 mg/m ³	BS EN 14792:2017 Dry & 15% O ₂	20/11/2019 10:50 – 11:50	UKAS/MCERTS	3%
A10	CO	----	357.96 mg/m ³	BS EN 15058:2017 Dry & 15% O ₂		UKAS/MCERTS	2%
A10	Particulates	----	1.56 mg/m ³	BS EN 13284-1: 2017	20/11/2019 10:50 – 11:50	UKAS/MCERTS	14%

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. gas chromatography.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[4] The accreditation status of the equipment and/or the monitoring organisation, as appropriate, for the methods used for both sampling and analysis.

[5] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated. The following uncertainties are quoted on a different basis (basis as stated) – *{The basis of any other uncertainty figure needs to be stated. Where no figure is available the Agency will need to agree an appropriate uncertainty value.}*

Operator's comments: - Due to nationwide laboratory issues; particulate data is unavailable at the time of this report submission. This will be re-issued as soon as the data is received. Data reissued 31/1/20

Notes –

1. Emission point A5 (Wanson Boiler) has been locked off and decommissioned.

2. Emission point A7 (Yorkshire Pudding Oven) decommissioned in August 2019.

3. Emission point A10 at time of testing resulting in higher than expected NO_x, the CHP manufacturer was called and the CHP engine burner was recalibrated for 95mg/m³ at 15% O₂ (Initial test was 196mg/m³ at 5% O₂ – Current limit is 250mg/m³ at 5%). Awaiting ECL to come back to site to undertake an additional sampling test for reconfirmation.

**Signed Robert Davies (Head of engineering)
(Authorised to sign as representative of the Operator)**

Date: 31st January 2020

Permit Reference Number: UP3237CP

Operator: Solway Foods Ltds

Installation: 23 Rogerstone Park

Form Number: S1

Reporting of Emissions to Sewer for the period from Jan 1st 2019.....to...Dec 31st 2019

Emission Point	Substance / Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
S1	pH		6.31		Fortnightly	Welsh Water	
S1	Flow Rate		1785.9m3/day	Welsh Water	Fortnightly	MCERTS meter	
S1	COD		811	Chemical Oxygen Demand (dichromate Value) of Polluted and waste waters 1986 (2 nd Edition)	1 st Jan 19-31 st Dec 19	Hmso isbn:0117519154	3.5% High Standard
S1	Suspended solids		388	Suspended,Settleable & total dissolved Solids in waters and effluents 1980	1 st Jan 19-31 st Dec 19	Hmso isbn 01751957x	19.7% High Standard
S1	Cadmium	0.01 mg/l ^[6]	0.0000154	Mass Balance Calc	1 st Jan 19-31 st Dec 19	Supplier/MSDS	
S1	Mercury	0.0001 mg/l ^[6]	0.0000482	Mass Balance Calc	1 st Jan 19-31 st Dec 19	Supplier/MSDS	
S1	Cadmium and its compounds	2800 g/year ^[6]	11.52g/year	Mass Balance Calc	1 st Jan 19-31 st Dec 19	Supplier/MSDS	
S1	Mercury and its compounds	330 g/year ^[6]	36.12g/year	Mass Balance Calc	1 st Jan 19-31 st Dec 19	Supplier/MSDS	

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. colorimetry.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements, or flow/time proportional samples, the percentage of the process operating time covered by the monitoring is given.

[4] The accreditation status of the equipment and/or the monitoring organisation, as appropriate, for the methods used for both sampling and analysis.

[5] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated. The following uncertainties are quoted on a different basis (basis as stated).

[6] The emission limit values for cadmium and mercury are expressed as maximum individual values.

**Signed Robert Davies (Head of Engineering)
(Authorised to sign as representative of the Operator)**

Date: 23rd January 2020

Permit Reference Number: UP3237CP

Operator: Solway Foods Ltd

Installation: Rogerstone Park

Form Number : R1

Reporting of Waste Disposal and Recovery for the year Jan 1st 2019.....to...Dec 31st 2019

Waste Description	Disposal Route	Tonnes	Recovery Tonnes
General Waste	Off Site Waste – To- Energy	3,054	0
Food Wastes (packed and loose food Cat 3 to AD Plant)	Off site - AD Plant	3,646	3,646
Category 3 waste unfit for human consumption non-haz. Waste (ETP /potato sludge)	AD Plant	7,746	7,746
Other non-haz. wastes	Recycling	767.5	767.5
Rapeseed Oil	Recycling (biofuel)	129.1	129.1
Total non-haz. waste		15,342	15,342
Total Haz. Waste	Recovered	15.32	15.32
TOTAL WASTE	-	15,357.9	12,303.9

Trends in Waste Disposal and Recovery			
Year	Parameter		
	Total non hazardous waste	Total hazardous waste	Total waste per unit output
2011	15254	1.4	0.60
2012	13,324	3	0.58
2013	15366	5.33	0.59
2014	14564	2.9	0.54
2015	11010	2.6	0.42
2016	16444.8	6.2	0.58
2017	20,724	0	0.62
2019	15,342	15.32	0.51

Operator's comments :

Hazardous waste removed from site is in larger quantities than in previous years. This is due to new manager clearing and appropriately disposing, of an accumulated stock pile of materials on site. There was also an increase of lighting tube replacement in 2019.

Hazardous wastes removed fall under EWC's – 13.03.07, 13.05.07, 13.03.10, 15.01.10, 20.01.21, 16.03.05, 20.01.35

Signed Robert Davies (Head of Engineering)
(Authorised to sign as representative of the Operator)

Date: 23rd January 2020

Permit Reference Number: UP3237CP

Operator: Solway Foods Ltd

Installation: Rogerstone Park

Form Number: WU1

Reporting of Water Usage for the year Jan 1st 2019.....to...Dec 31st 2019

Water Source	Usage (m ³)	Specific Usage (m ³ /t)
Mains water		
2011	558874	22.02
2012	501772	21.93
2013	579250	22.43
2014	626567	23.18
2015	576706	21.99
2016	620000	22.85
2017	780000	23.45
2018	889453	25.55
2019	748920	25.28

Operator's comments: Water use is down from 2018 due to reduction measures implemented on shop floor.

Signed Robert Davies (Head of Engineering)
(Authorised to sign as representative of the Operator)

Date: 23rd January 2020

Permit Reference Number: UP3237CP

Operator: Solway Foods Ltd

Installation: Rogerstone Park

Form Number : E1

Reporting of Energy Usage for the year Jan 1st 2019.....to...Dec 31st 2019

Energy Source	Energy Usage		
	Quantity	Primary Energy (MWh)	CO ₂ Produced (tonnes)
Electricity *	MWh (9658)	23,180	3,850
Natural Gas	tonnes	112,390	21,354
TOTAL	-		

Year	Trends in Energy Usage		
	Parameter	CO ₂ produced	CO ₂ per unit output
2011	124,600	22,275	0.88
2012	111278	20,029	0.88
2013	119543	21,477	0.83
2014	127848	22,918	0.84
2015	13166	23,581	0.89
2016	16565	30149	1.06
2017	14675	26481	0.80
2018	13442	24108	0.76
2019	13557	25,204	0.85

* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments :
Co2 primary Electricity MWh *0.1661 = tonnes Co2
Co2 Natural gas MWh *0.19 = tonnes Co2

Signed Robert Davies (Head of Engineering)
(Authorised to sign as representative of the Operator)

Date: 23rd January 2020

Permit Reference Number: UP3237CP

Operator: Solway Foods Ltd

Installation: Rogerstone Park

Form Number: PI1

Reporting of Performance Indicators for the year Jan 1st 2019.....to...Dec 31st 2019

Annual Production/Treatment	
Production of frozen and chilled produce	tonnes
	29,620

Environmental Performance Indicators

Parameter	Annual Average	Units
Effluent discharged to sewer	22.00	M3/tonnes
Water use	25.28	M3/tonnes
Non-hazardous waste	0.51	Tonne/Tonne
Hazardous waste	0.00051	Tonne/Tonne

Trends in Environmental Performance				
Year	Parameter	Water use	Non-hazardous waste	Hazardous waste
2011	Effluent discharged to sewer	22.02	0.59	0.00005
2012		21.93	0.58	0.00013
2013		22.43	0.58	0.00027
2014		23.20	0.54	0.00027
2015		21.99	0.41	0.0001
2016		22.85	0.58	0.0002
2019		25.28	0.51	0.00051

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(Authorised to sign as representative of the Operator)

Date: 23rd January 2020