

/*Operator: Dow Silicones UK Ltd
Installation: Barry Silicon-Based Manufacturing Installation

Permit Reference Number: BR96851X

2024 Annual Reporting for Dow Silicones UK Ltd

Parameters, for which reports are required, in accordance with conditions of the permit, are listed within this report.

Performance Parameter	Reporting Form	Page
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Quarterly Reporting of Emissions to Water (other than to Sewer) for the period from October 1 2024 to December 31 2024

Emission Point	Substance / Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
W1 via M1	Flow	11 000 m ³ /day	7437	Agreed ⁽¹⁰⁾	19-Nov	MCERT Approved	+/- 0.5%
W1 via M1	Flow	625 m ³ /hour	346.087	Agreed ⁽¹⁰⁾	06-Dec	MCERT Approved	+/- 0.5%
W1 via M1	pH – Min pH - Max	≥ 6 ≤ 9	6.93	To be agreed ⁽¹¹⁾	26-Nov	Under Review ⁽¹¹⁾	+/- 0.2%
			7.7598		07-Nov		
W1 via M1	Temperature	40 °C ^[6]	29.20	RTD ⁽¹²⁾	28-Dec	MCERTS Equiv ⁽¹²⁾	+/- 0.55 °C
W1 via M1	Suspended solids	30 mg/l (Note 8)	13.350	SCA Blue Book 105	Q4 2024	Under Review	+/- 6mg/l
W1 via M1	BOD ₅	20 mg/l	1.00	SCA Blue Book 130	01-Dec	UKAS	+/- 21%
W1 via M1	Copper	0.1 mg/l (Note 8)	0.02995	Inductively Coupled Plasma	Q4 2024	In house validated method	+/- 0.0096 mg/l
W1 via M1	Zinc	0.5 mg/l (Note 8)	0.00915	Inductively Coupled Plasma	01-Dec	In house validated method	+/- 0.02 mg/l
W1 via M1	Hydrocarbon oil	No visible sheen	No visible sheen	Visual Check	Q4 2024	N/A	N/A
W1 via M1	TOC	100 mg/l	28.112	EN 1484	Q4 2024 daily average	NA	NA
W2	pH	≥ 6, ≤ 9	No discharge from W2 during Q4 2024	pH probe	No discharge from W2 during Q4 2024	In house validated method	+/- 4%
W2	Suspended solids	30 mg/l (Note 15)		SCA Blue Book 105		Under Review	+/- 6mg/l
W2	BOD ₅	20 mg/l (Note 14)		SCA Blue Book 130		UKAS	+/- 21%
W2	COD	125 mg/l (Note 13)		Offsite Analysis		UKAS	Unknown
W2	Copper	0.15 mg/l (Note 7)		Inductively Coupled Plasma		In house validated method	+/- 0.0096 mg/l
W2	Zinc	0.25 mg/l (Note 7)		Inductively Coupled Plasma		In house validated method	+/- 0.02 mg/l
W2	Hydrocarbon oil	No visible sheen		Visual Check		N/A	N/A

- [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.
- [6] Not more than 5% of measurements in the reporting period shall exceed the limit value.
- [7] To be reported for each effluent transfer from W809 to W413.

Dow Silicones Notes:

- (8) The result is the 95%ile reading for the reporting period to demonstrate compliance with the emission limit value stated, which is a 95%ile limit.
- (10) Instrument and measurement technique has been reviewed under improvement item IP8. The final treated effluent Danfloss flow meter FT5098 has been MCERT approved. It has been agreed that from 1 October 2009 onwards that the dry flow rate discharge limit of 11,000 m3/day will apply and that reported flow data will relate purely to treated effluent with storm water flow (from W952 penstock valve) excluded from the totalised discharge from release point W1.
- (11) Instrument and measurement technique has been reviewed under improvement item IP10. Existing pH meters will be replaced by MCERT certified pH meter upon failure. Current meters deemed satisfactory in the interim.
- (12) Instrument and measurement technique was reviewed under Note 7 Table 2.2.5 and Agency responded. A New MCERT equivalent resistance thermometer was installed by Dow Silicones in Q4 2007.
- (13) No spot sample shall exceed the limit value by more than 50%. Limit is 125 mg/l so allowable spot sample result is 187.5 mg/l.
- (14) No spot sample shall exceed the limit value by more than 50%. Limit is 20 mg/l so allowable spot sample result is 30 mg/l.
- (15) No spot sample shall exceed the limit value by more than 50%. Limit is 30 mg/l so allowable spot sample result is 45 mg/l.

Signed



Date: ...28th January 2025.....

(authorised to sign as representative of Operator)

Quarterly Reporting of Emissions to Air for the period from **October 1 2024 to December 31 2024**

Emission Point	Substance / Parameter	Emission Limit Value	Result ^[1]		Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
A26	Class B VOC's	No limit applies	1.3577	kg/hr	Gas chromatography	04/12/2024 11:50	In House Validated Method	3.6%
A26	Siloxanes	Agreed Limit ⁽⁶⁾	0.4740	kg/hr	Gas chromatography	04/12/2024 11:50	In House Validated Method	3.6%
A27	Siloxanes	Agreed Limit ⁽⁶⁾	0.0262	kg/hr	Gas chromatography	04/12/2024 11:50	In House Validated Method	3.6%
A43	Hydrogen chloride	10mg/m ³	0.1290	mg/m ³	Ion chromatography	12/12/2024 10:06	In House Validated Method	3.6%
A44	Hydrogen chloride	10mg/m ³	See note 8		Ion chromatography	N/A	In House Validated Method	3.6%
A57	Hydrogen chloride	10mg/m ³	1.2725	mg/m ³	Ion chromatography	04/12/2024 11:51	In House Validated Method	3.6%
A60	Class B VOC's	5000 kg/year ⁽⁷⁾	0.0350	kg/hr	Gas chromatography	12/12/2024 10:05 2024 TOTAL	In House Validated Method	3.6%
			155.3876	kg				
A65	Siloxanes	Agreed Limit ⁽⁶⁾	0.0643	kg/hr	Gas chromatography	26/11/2024 15:50	In House Validated Method	3.6%
A68	Class B VOC's	5000 kg/year ⁽⁷⁾	0.2143	kg/hr	Gas chromatography	26/11/2024 15:51 2024 TOTAL	In House Validated Method	3.6%
			1190.0183	kg				
A68	Siloxanes	Agreed Limit ⁽⁶⁾	1.2423	kg/hr	Gas chromatography	26/11/2024 15:51	In House Validated Method	3.6%
A78	Class A VOC's	No limit. Temperature (°C)	23.5957	°C	RTD	29/12/2024 05:01	Internally Calibrated	0.02%
A79	Siloxanes	Agreed Limit ⁽⁶⁾	0.9636	kg/hr	Gas chromatography	06/11/2024 15:47	In House Validated Method	3.6%
A85	Siloxanes	Agreed Limit ⁽⁶⁾	0.0046	kg/hr	Gas chromatography	16/04/2024 14:30	In House Validated Method	3.6%
A123	Siloxanes	Agreed Limit ⁽⁶⁾	0.0802	kg/hr	Gas chromatography	06/11/2024 15:47	In House Validated Method	3.6%
A124	Siloxanes	Agreed Limit ⁽⁶⁾	0.0000	kg/hr	Gas chromatography	26/11/2024 15:51	In House Validated Method	3.6%
A125 ⁽¹⁰⁾	Siloxanes	Agreed Limit ⁽⁶⁾	0.1683	kg/hr	Gas chromatography	04/12/2024 11:51	In House Validated Method	3.6%

[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.

[6] Emission limit to be agreed following completion of IP14. This was deferred for consideration with IP25. No limit applies.

[7] Emission limit agreed following completion of IP4 (5000 kg/year).

Dow Silicones Notes:

(8) A44 is now decommissioned (vent is released via A43).

(9) Releases modelled as part of IP16. Agency agreed that releases do not require abatement and that limit no longer applies. Instead the vent temperature will be recorded on form A2 quarterly to ensure vent condenser performance does not deteriorate. A new temperature transmitter was installed in 2009 to give continuous temperature monitoring with operator alarm for elevated condenser outlet temperature to trigger condenser cleaning operations. Result recorded is the maximum temperature value obtained during the reporting period.

(10) A125 – Tank 225 has been added to the reporting sheet at the request of the site inspector.

Signe



Date... .. 28th January 2025

(authorised to sign as representative of Operator)

Annual Reporting of Emissions to Air for the period from January 1 2024 to December 31 2024

Emission Point	Substance / Parameter	Emission Limit Value	Result ^[1]	Units	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
A12, A33, A34, A40 ⁽¹⁰⁾	Chloromethane	60 000kg/year	6773.156	kg/yr	US EPA Method 18	2024 Total	In House GC	A12 = 4% A33 = 24% A34 = 3% A40 = 3.6%
A12, A33, A34, A40 ⁽¹⁰⁾	Chloromethane	1000kg/day	456.896	kg/day	US EPA Method 18	11/04/2024	In House GC	A12 = 4% A33 = 24% A34 = 3% A40 = 3.6%
A12, A33, A34, A40 ⁽¹⁰⁾	Chloromethane	250kg/hour	41.761	kg/hr	US EPA Method 18	29/06/2024 10:00-11:00	In House GC	A12 = 4% A33 = 24% A34 = 3% A40 = 3.6%
A33	Methanol	60kg/hour	Note 16	kg/hr	US EPA Method 18	n/a	In House GC	42%
A34	Methanol	60kg/hour	30.92	kg/hr	US EPA Method 18	05/06/2024 16:00 – 17:00	In House GC	1%
A12	Methane ^[6]	No limit applies	Note 16	kg/hr	US EPA Method 18	n/a	In House GC	1%
A12	Non-methane hydrocarbons ^[6]	No limit applies	Note 16	kg/hr	US EPA Method 18	n/a	In House GC	2%
A40	Silanes ^[6]	No limit applies	n/a	-	Gas chromatography	n/a	In House validated Method	3.6%
A40	Silanes ^[7]	No limit applies	n/a	-	Gas chromatography	n/a	In House validated Method	3.6%
A41	Particulates	10 mg/m ³	5.56	mg/m ³	BS EN 13284	14/08/2024	UKAS & MCERTS	+/- 0.33
A41	Carbon monoxide	50mg/m ³	1.4	mg/m ³	ISO 12039	26/01/2024	In House validated Method	13%
A41	Oxides of nitrogen as NO ₂	100mg/m ³	22.51	mg/m ³	ISO 10849	20/02/2024	In House validated Method	11%
A41	Dioxins and furans	0.1ng/m ³	0.00370	ng/m ³	BS EN 1948	21/08/2024	UKAS & MCERTS	+/- 0.003
A48	Oxides of nitrogen as NO ₂	No limit applies	150.01	mg/m ³	ISO 10849	17/09/2024	In House validated Method	11%
A48	Carbon monoxide	No limit applies	1.00	mg/m ³	ISO 12039	17/09/2024	In House validated Method	13%

Emission Point	Substance / Parameter	Emission Limit Value	Result ^[1]	Units	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
A50	Oxides of nitrogen as NO ₂	200mg/m ³	57	mg/m ³	ISO 10849	21/11/2024	In House validated Method	11%
A50	Carbon monoxide	200mg/m ³	24	mg/m ³	ISO 12039	21/11/2024	In House validated Method	13%
A85	Hydrogen chloride ^[8]	10mg/m ³	Note 14	mg/m ³	BS EN 1911:1998	n/a		
A26	Class B VOC's ^[9]	No limit applies	1.369	kg/hr	BS EN 13649	Annual average	In House validated Method	3.6%
A60	Class B VOC's ^[9]	5,000 kg/yr ⁽¹¹⁾	155.3876	kg	BS EN 13649	Annual total	In House validated Method	3.6%
A68	Class B VOC's ^[9]	5,000 kg/yr ⁽¹¹⁾	1190.0183	kg	BS EN 13649	Annual total	In House validated Method	3.6%
A26	Siloxanes ^[9]	An agreed limit ⁽¹²⁾	0.608	kg/hr	Gas chromatography	Annual average	In House validated Method	3.6%
A65	Siloxanes ^[9]	An agreed limit ⁽¹²⁾	0.200	kg/hr	Gas chromatography	Annual average	In House validated Method	3.6%
A68	Siloxanes ^[9]	An agreed limit ⁽¹²⁾	2.384	kg/hr	Gas chromatography	Annual average	In House validated Method	3.6%
A79	Siloxanes ^[9]	An agreed limit ⁽¹²⁾	0.608	kg/hr	Gas chromatography	Annual average	In House validated Method	3.6%

[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.

[6] Maximum kg/h obtained during the reporting period.

[7] Total release during the reporting period.

[8] Reporting only required if phosphonitrile production during reporting year.

[9] Average of quarterly reported values in reporting year.

[10] Based on an agreed emission factor

[11] Emission limit agreed following completion of IP4

[12] Emission limit to be agreed following completion of IP14. This has been deferred for consideration with IP25. No limit was agreed.

Dow Silicones Notes:

(13) There is no routine monitoring frequency required for A40 apart from the requirements listed in Table 2.10.1 under 'other requirements' and a method for such testing has not yet been agreed with the Agency. Dow Silicones has agreed with the Agency to use previously agreed IPC emission factors for silane releases from A40 for PI

reporting purposes, as described in IPC improvement item 8.21. Under Improvement item IP3 the Environment Agency agreed to remove the requirement for silane monitoring at A41 when the ERU is not available for periods greater than 6 hrs.

(14) This is no longer made in W307.

(15) This was reported as a Schedule 5, no other exceedances during 2019

(16) No emissions from A12 and A33 in 2024 as plants not running.

Signe 

Date... .. 28th January 2025

(authorised to sign as representative of Operator)

Annual Reporting of Emissions to Air for the period from **January 1 2024 to December 31 2024**

Emission Point	Substance / Parameter	Emission Limit Value	Result ^[1] Mg/m ³	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
A41	Hydrogen chloride	15mg/m ³	1.60	US EPA Method 26	10/01/2024	UKAS & MCERTS	±36%
			0.26	US EPA Method 26	26/01/2024	UKAS & MCERTS	±36%
			0.61	US EPA Method 26	20/02/2024	UKAS & MCERTS	±36%
			0.59	US EPA Method 26	26/03/2024	UKAS & MCERTS	±36%
			0.83	US EPA Method 26	19/04/2024	UKAS & MCERTS	±36%
			0.95	US EPA Method 26	15/05/2024	UKAS & MCERTS	±36%
			0.57	US EPA Method 26	12/06/2024	UKAS & MCERTS	±36%
			0.52	US EPA Method 26	11/07/2024	UKAS & MCERTS	±36%
			1.48	US EPA Method 26	14/08/2024	UKAS & MCERTS	±36%
			2.23	US EPA Method 26	17/09/2024	UKAS & MCERTS	±36%
			0.46	US EPA Method 26	21/11/2024	UKAS & MCERTS	±36%
		0.17	US EPA Method 26	17/12/2024	UKAS & MCERTS	±36%	
		10mg/m ³	0.86		Annual Average		

[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.

Dow Silicones Notes:

HCl results are corrected for STP, ref 11% O₂, dry

12 evenly spread samples throughout the year, no sample in October due to site turnaround.

Signe

Date... ... 28th January 2025 .

(authorised to sign as representative of Operator)

Annual Reporting of Emissions to Air for the period from **January 1 2024 to December 31 2024**

Emission Point	Substance / Parameter	Emission Limit Value	Result ^[1] Mg/m ³	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
A41	Chlorine	15mg/m ³	1.47	US EPA Method 26	10/01/2024	UKAS & MCERTS	±36%
			0.04	US EPA Method 26	26/01/2024	UKAS & MCERTS	±36%
			0.313	US EPA Method 26	20/02/2024	UKAS & MCERTS	±36%
			0.43	US EPA Method 26	26/03/2024	UKAS & MCERTS	±36%
			0.69	US EPA Method 26	19/04/2024	UKAS & MCERTS	±36%
			0.68	US EPA Method 26	15/05/2024	UKAS & MCERTS	±36%
			0.74	US EPA Method 26	12/06/2024	UKAS & MCERTS	±36%
			0.26	US EPA Method 26	11/07/2024	UKAS & MCERTS	±36%
			0.87	US EPA Method 26	14/08/2024	UKAS & MCERTS	±36%
			14.27	US EPA Method 26	17/09/2024	UKAS & MCERTS	±36%
			4.45	US EPA Method 26	21/11/2024	UKAS & MCERTS	±36%
		0.73	US EPA Method 26	17/12/2024	UKAS & MCERTS	±36%	
		10mg/m ³	2.13		Annual Average		

[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.

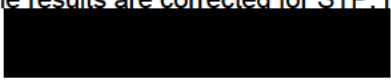
[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[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.

Dow Silicones Notes:

Chlorine results are corrected for STP, ref 11% O₂, dry

Signed  Date... .. 28th January 2025

(authorised to sign as representative of Operator)

Annual Reporting of Emissions to Air for the period from **January 1 2024 to December 31 2024**

There weren't any transfers of Spent bed into W348 TCS spend bed tank and therefore no potential for associated chloromethane releases in 2024

Emission Point	Substance / Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
A57	Chloromethane	2kg/h	N/A				

[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.

Dow Silicones Notes:

There weren't any transfers of Spent bed into W348 TCS spend bed tank and therefore no potential for associated chloromethane releases in 2024


Sign 

Date... .. 28th January 2025

(authorised to sign as representative of Operator)

Waste Description	Route	Disposal Tonnes	Recovery Tonnes
Food waste for composting	Composted		7.12
General Waste	Energy recovery		208.71
Glass	Energy recovery		1.87
Lagging	Energy recovery		39.56
Magnesium Oxide/Calcium Carbonate	Landfill	30.23	
Paint Tins	Recycling		3.38
Paper	Energy recovery		13.77
Plastic	Energy recovery		50.30
Rubber	Energy recovery		262.59
Scrap metal	Recycling		245.85
Shot Blast	Recycling		60.52
Silicon Metal	Recycling		40.64
Wood	Recycling		224.46
Empty drums (tonnes)	Recycling		142.65
Empty IBC (tonnes)	Recycling		71.30
Pallets (Tonnes)	Recycling		15.17
DMR	Recycling		9.73
Total Non Hazardous waste		2981.44	1572.59
TOTAL WASTE		6941.66	17915.24

Trends in Waste Disposal and Recovery			
Year	Parameter		
OPERATOR COMMENTS:			
Increased calcium filtercake disposal due to stockpiling in 2023, therefore disposal rate was increased to decrease this.			
Reduction in spend sulphuric acid recovery due to outlet declaring force majeure during 2024. This caused an increase to the disposal of spent sulphuric acid instead.			
E-tank solids clean out not required in 2024 compared to 2023.			
Reduction in biosludge due to more efficient management of biosludge growth and steady operation of SWWT process.			
Reduction in calcium slurry due to PWWT reliability and operation.			
Reduction in scrap metal and shot blast disposal, figures were high during 2023 due to a lot of on site projects to repaint/repair steelwork. 2024 levels more typical.			

Signed ...  Date... .. 28th January 2025

(authorised to sign as representative of Operator)

Reporting of Water Usage for the year 2024

Water Source	Usage (m ³)	Specific Usage (m ³ /t)
Towns water	526,534	
Bigliss well water	1,646,094	
Cadoxton river water	0	
TOTAL WATER USAGE	2,172,628	

Year	Trends in Water Usage				
	Parameter				
	Towns water	Bigliss well water	Cadoxton river water	Total water usage	Water per unit output
2009	121,193	821,102	899,394	1,851,689	
2010	237,014	986,518	748,770	1,972,302	
2011	273,504	932,737	925,974	2,132,215	
2012	187,886	826,251	1,058,541	2,072,658	
2013	230,623	933,912	899,926	2,064,461	
2014	230,189	768,111	551,771	1,550,071	
2015	244,473	785,203	564,798	1,594,474	
2016	276,011	993,693	442,702	1,712,406	
2017	245,697	1,248,673	863,303	2,357,673	
2018	418,725	1,267,630	681,722	2,368,077	
2019	533,863	1,613,548	43,995	2,191,407	
2020	436,123	1,604,408	61,033	2,101,565	
2021	357,393	1,508,081	19,981	1,885,454	
2022	510,953	1,362,543	7,837	1,881,334	
2023	334,581	1,584,214	0	1,918,795	
2024	526,534	1,646,094	0	2,172,628	

#

Operator's comments :
 Towns water data obtained from invoices.
 River water and Biglis water is measured.
 The Biglis water consumption includes the supply to the CHP

Sign 

Date... 28th January 2025

(authorised to sign as representative of Operator)

Annual Reporting of Energy Recovery Unit Availability for the period from **January 1 2024 to December 31 2024**

Process	Parameter	Month	Result ^[3] , %
Energy Recovery Unit W949	Availability	January	93.79%
		February	99.83%
		March	99.99%
		April	96.59%
		May	99.41%
		June	96.31%
		July	100.00%
		August	97.41%
		September	89.16%
		October	17.31%
		November	99.96%
		December	100.00%

[1] Based on the availability to process 100% of W714 FBR vent. Calculated using feed valve position and positive flows.

{2} 2023 the W714 unit was not operational.

[3] As W714 has not been operational post September 2020 – the availability has been calculated based on the availability to process vents from W931 and W930. This does include periods of lower venting due to online cleaning.

Signed 

Date... .. 28th January 2025

(authorised to sign as representative of Operator)