Permit Reference Number: **NP 3433 BC**

Operator: **Convatec Limited**

Installation: **Convatec Rhymney Hydrocel Plant**

Form Number: **A1**

Reporting of Emissions to Air for the period from: 01 Oct 2024 to 31 Dec 2024

Emission Point	Substance / Parameter	Emission Limit Value	Result [1]	Test Method [2] [6]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
A1A	VOC[a] (extractive)	20mg/m³	5.5	BS EN 12619	30/10/2024 10:10AM - 11:10AM	MCERT / ISO 17025	+/- 0.43
A1A	Oxides of Nitrogen[a] (extractive)	50mg/m³	2.4	BS EN 14792	30/10/2024 10:10AM - 11:10AM	MCERT / ISO 17025	+/- 2.9
A1A	Carbon Monoxide[a] (extractive)	100mg/m³	1.6	BS EN 15058	30/10/2024 10:10AM - 11:10AM	MCERT / ISO 17025	+/- 0.68

New monitoring requirements as per permit variation v005, confirmed via CAR: **CAR_NRW0034967**

Note a: Expressed as Total Carbon

[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] Monitoring methods and schedules to be agreed in writing by the Environment Agency on completion of Improvement Programme items IP6, IP7 and IP8, when the Environment Agency will also set Emission Limit Values for these Release Points by varying the Conditions of the Permit. The reference measurements used shall be agreed in writing by the Agency.

Signed [redacted]…… Date 30/01/2025

([redacted] Operator)

Permit Reference Number: **NP 3433 BC**

Operator: **Convatec Limited**

Installation: **Convatec Rhymney Hydrocel Plant**

Form Number: **S1**

Reporting of Emissions to Sewer for the period from: 01 Oct 2024 to 31 Dec 2024

Emission Point	Substance / Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
S1	pH	6-11	6.9	WAS 039	15/11/2024 06:15AM	UKAS/ISO17025	+/-2.85 to +/-1.39%
S1	COD	4000mg/l	404	WAS 040	15/11/2024 06:15AM	UKAS/ISO17025	+/-5.07 to +/-2.36%
S1	Suspended solids	1000mg/l	6	WAS 006	15/11/2024 06:15AM	UKAS/ISO17025	+/-19.93%

[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

Signed ……[redacted]……. Date 30/01/2025

Permit Reference Number: **NP 3433 BC**

Operator: **Convatec Limited**

Installation: **Convatec Rhymney Hydrocel Plant**

Form Number: **SED1**

Reporting of Solvent Emissions for the period from: 01 Oct 2024 to 31 Dec 2024

Emission Point	Substance / Parameter	Emission Limit Value	Result [1]
All emissions (including fugitive, excluding solvent sent for recovery)	VOC	<5% of total solvent input	1.6% by mass balance

[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.

Signed … [redacted] Date 30/01/2025

(Authorised to sign as representative of the Operator)

Permit Reference Number: **NP 3433 BC**

Operator: **Convatec Limited**

Installation: **Convatec Rhymney Hydrocel Plant**

Form Number: **R1**

Reporting of Waste Disposal and Recovery for the year: 2024

Waste Description	Disposal		Recovery
	Route	Tonnes	Tonnes
Solvent/Water	Tanker	5830.72	3301.814
Trickling filter blowdown	Tanker	0	0
Bund water removal	Tanker	0	0
Landfill Waste	Containers	0.788	0
Recycled Waste	Skip	32.905	32.905
Energy from waste	Skip	93.539	0
1) Total hazardous waste		5840	3301.814
2) Total non-hazardous waste		117.195	32.905
TOTAL WASTE		5957.195	3334.719

Trends in Waste Disposal and Recovery			
Year	Parameter		
	Total hazardous waste disposed and recovered (tonnes)	Total waste disposed and recovered (tonnes)	Total Hazardous Waste per unit output (tonnes /tonne)
2007	2255	2272	12.6
2008	2129	2146	12.5
2009	1628	1641	12.1
2010	1424	1437	12.3
2011	1922	1944	12.9
2012	1750	1776	11.4
2013	2477	2497	10.2
2014	2399	2416	9.63
2015	2345	2350	9.48
2016	2818	2835	9.36
2017	3248	3282	9.28
2018	2988	3033	9.03
2019	2760	2850	9.14
2020	2422	2578	8.90
2021	2719	2788	8.50
2022	2982	3034	8.74
2023	3299	3368	8.84
2024	3302	3335	9.30

Operator's comments :

Signed ……[redacted]

Date 30/01/2025

(Authorised to sign as representative of the Operator)

Permit Reference Number: **NP 3433 BC**

Operator: **Convatec Limited**

Installation: **Convatec Rhymney Hydrocel Plant**

Form Number: **WU1**

Reporting of Water Usage for the year: 2024

Water Source	Usage (m^3)	Specific Usage (m^3/tonne)
Mains water (potable)	12864	36.24
Non potable water	0	0
TOTAL WATER USAGE	12864	

Trends in Water Usage		
Year	Parameter	
	Total Water usage (m^3)	Total Water Usage per unit output (m^3/tonne)
2006	11609	100
2007	10321	57.7
2008	9769	57.5
2009	9827	72.8
2010	7794	56.5
2011	12012	80.6
2012	13516	87.8
2013	28803	119
2014	32171	129.2
2015	25008	100.8
2016	25439	84.5
2017	34323	98.1
2018	31788	94.6
2019	22036	72.9
2020	11182	41.11
2021	10655	33.29
2022	11563	33.89
2023	10651	28.55
2024	12864	36.24

Operator's comments :

Signed … [redacted]

Date 30/01/2025

(Authorised to sign as representative of the Operator)

Permit Reference Number: **NP 3433 BC**

Operator: **Convatec Limited**

Installation: **Convatec Rhymney Hydrocel Plant**

Form Number: **E1**

Reporting of Energy Usage for the year: 2024

Energy Source	Energy Usage		Primary CO_2 Produced (tonnes)
	Quantity(MWh)	Primary Energy (MWh)	
Electricity *	3797.458	9113.899	3918.977
Gas	7977.909	7977.909	1515.803
TOTAL	11775.367	17091.808	5434.78

Trends in Energy Usage			
Year	Parameter		
	Primary Energy usage (MWh)	Primary CO_2 Produced (tonnes)	Primary CO_2 per tonne product (tonnes/tonne)
2007	7401	2628	14.1
2008	8242	2859	16.8
2009	7578	2690	19.9
2010	7718	2723	19.7
2011	8201	2886	19.4
2012	9010	1566	10.2
2013	13516	2382	9.84
2014	13281	2338	9.4
2015	13349	2349	9.4
2016	13815	2435	8.1
2017	14946	4964	14.2
2018	14673	4893	14.6
2019	15136	4887	16.2
2020	14497	4705	17.3
2021	14561	4754	14.85
2022	15586	5022	14.72
2023	16995	5461	14.64
2024	17092	5435	15.31

* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments :

Signed … [redacted]

Date 30/01/2025

(Authorised to sign as representative of the Operator)

Permit Reference Number: **NP 3433 BC**

Operator: **Convatec Limited**

Installation: **Convatec Rhymney Hydrocel Plant**

Form Number: **PI1**

Reporting of Performance Indicators for the year: 2024

Annual Production/Treatment	
Production of Hydrocel	242
Percentage converted to Silver Hydrocel	46

Environmental Performance Indicators [EPI's]

Parameter	Annual EPI	Units
VOC emission per tonne of product	2.36	Kg/tonne
Waste produced per tonne of product	16781	Kg/tonne
Energy use: primary carbon dioxide per tonne product	15310	Kg/tonne

Trends in Environmental Performance

Year	Parameter
	VOC released per tonne product (Kg/tonne)
2008	61.5
2009	61.1
2010	62.1
2011	326.6
2012	167.1
2013	306.5
2014	382.5
2015	380.8
2016	468.0
2017	174.9
2018	178.2
2019	0.25
2020	0.92
2021	0.08
2022	0.08
2023	0.51
2024	2.36

Operator's comments : Annual U1 production (tonnes):- 2011 – 149, 2012 -154, 2013 – 242, 2014 – 249, 2015 – 248, 2016 – 312, 2017 – 350, 2018 – 336 2019 – 302, 2020 – 272, 2021 -320 2022 – 341 2023 – 373 2024 – 355

Signed [redacted] Date 30/01/2025

(Authorised to sign as representative of the Operator)