Permit Number:	DP3832EF	Operator:	Biotage GB Limited
Facility:	Unit C IST House	Form Number:	WaterUsage1 / 23/01/2024

Reporting of Water Usage for the year 2023

Water Source	Usage (m^3/year	Specific Usage (m^3/unit output)
Mains water	3834.1 m^3 / year	7040.2 m^3 / tonne
Site borehole	0.0 m^3 / year	
River abstraction	0.0 m^3 / year	
TOTAL WATER USAGE	3834.1 m^3 / year	7040.2 m^3 / tonne

Operator's comments :

Signed ..... [redacted] ..... Date.....23/01/24 .....

(authorised to sign as representative of Operator)

Permit Number: EPR/DP3832EF Operator: Biotage GB Limited

Facility: Unit C IST House, Distribution Way. Form Number: Air1 / 23/01/24

Reporting of emissions to air for the period from 01/01/2023 to 31/12/2023

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A1 Main building EP1	Hydrogen chloride	15.12 g/hr	Duration of batch reaction				
A1 Main building EP1	VOC - Methanol	4.0824 g/hr	Duration of batch reaction				
A2 Main building EP1	Hydrogen chloride	49.068 g/hr	Duration of batch reaction				
A2 Main building EP1	VOC - Methanol	45.684 g/hr	Duration of batch reaction				
A3 Main building EP1	Oxides of nitrogen (as NO_2)	48.84 g/hr	Duration of batch reaction	13.63 g/hr (7.78 g/hr)	BS EN 14792:2017	04/09/19 – 05/09/19; 14:35 – 15:20	3
A3 Main building EP1	VOC - Methanol	355.68 g/hr	Duration of batch reaction	Not measured			
A4 Resin shed EP2	Hydrogen Bromide	0.6264 g/hr	Duration of batch reaction	0.074 g/hr (0.039 g/hr)	US EPA Method 26	03/09/19 – 04/09/19 13:07 – 12:30	13

Comment: re figures in Results column in brackets represent average emissions over the batch process.

[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 Natural Resources Wales is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example 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 uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed ..... [redacted] ..... Date.....23/01/24.....

(Authorised to sign as representative of Operator)

Permit Number:	DP3832EF	Operator:	Biotage GB Limited
Facility:	Unit C IST House	Form Number:	Energy1 / 23/01/24

Reporting of Energy Usage for the year 2023

Energy Source	Energy Usage Quantity	Primary Energy (MWh)	Specific Usage (MWh/unit output)
Electricity *	498.32 MWh	1,195.98 MWh	915.02 MWh / tonne
Natural Gas	187.45 MWh		344.20 MWh / tonne
Gas Oil	0.0 tonnes		
Recovered Fuel Oil	0.0 tonnes		
TOTAL	685.77 MWh		1259.22 MWh / tonne

* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments :

Signed [redacted] Date……23/01/24……..

(Authorised to sign as representative of Operator)

Permit Number: EPR/DP3832EF Operator: Biotage GB Limited

Facility: Unit C IST House, Distribution Way. Form Number: Performance1 / 23/01/24

Reporting of other performance indicators for the period 01/01/2023 **to** 31/12/2023

Parameter	Units	
Polystyrene polymer	0.0240	tonnes/year for activity A1
Bromine	0.0175	tonnes/year for activity A1
Iron (III) chloride	0.0005	tonnes/year for activity A1
Dichloromethane	1.1970	tonnes/year for activity A1
Methanol	0.2531	tonnes/year for activity A1
Amorphous synthetic silica	0.2945	tonnes/year for activity A2
Ethylbenzene	0.6024	tonnes/year for activity A2
Imidazole	0.0151	tonnes/year for activity A2
Trichlorosilanes (various)	0.1472	tonnes/year for activity A2
Hexane	1.1252	tonnes/year for activity A2
Acetone	1.8339	tonnes/year for activity A2
Methanol	1.0307	tonnes/year for activity A2
Si – Thiol	0.1697	tonnes/year for activity A3
Nitric Acid	0.2130	tonnes/year for activity A3
Methanol	2.1159	tonnes/year for activity A3
Bonded silica sorbents	0.0165	tonnes/year for activity A4
Dichloromethane	0.0633	tonnes/year for activity A4
Chlorosulfonic acid	0.0198	tonnes/year for activity A4
Methanol	1.0046	tonnes/year for activity A4
Total amount of product produced – Activity A1	0.0306	tonnes
Total amount of product produced – Activity A2	0.3317	tonnes
Total amount of product produced – Activity A3	0.1664	tonnes
Total amount of product produced – Activity A4	0.0159	tonnes
Total amount of product produced	**0.5446**	tonnes

Parameter	Units	
Total amount of hazardous waste produced	74.944	tonnes
Total amount of non-hazardous waste produced	40.67	tonnes
Total amount of mixed recycling waste produced	59.06	tonnes

Operator's comments :

NB Waste quantities added to this form as there was nowhere else to report them.

Signed ..... [redacted] ..... Date.....23/01/24.....

(Authorised to sign as representative of Operator)