

Permit Number:	TP3835LV	Operator:	SI Green UK Limited
Installation:	Cwmrhydyceirw Quarry		
Schedule 4 - Emissions and monitoring	Table S4.5 and Table 5a from the Updated Management Report dated January 2021		
Reporting of emissions to water (other than to sewer) for the period from	Quarter 1	01 January - 31 March	2023
Groundwater monitoring borehole			
Monthly	Units		
Water level	January	mAOD	-
Water level	February	mAOD	-
Water level	March	mAOD	-
Analyte	Emission limit value	Units	
Monthly - CWMS02 only			
January			
Sample collection date	10/01/2023		
Suspended solids	40	mg/l	81.2
pH	>6 - <9	pH units	7.8
Ammoniacal Nitrogen as N	2.1	mg/l	0.01
Chloride as Cl	221	mg/l	27.5
Cadmium , Total as Cd	0.2	ug/l	<0.11
Nickel , Total as Ni	50	ug/l	<1.5
Naphthalene	1	ug/l	<0.05
Pentachlorophenol	1	ug/l	<0.05
February			
Sample collection date	03/02/2023		
Suspended solids	40	mg/l	14
pH	>6 - <9	pH units	7.2
Ammoniacal Nitrogen as N	2.1	mg/l	0.28
Chloride as Cl	221	mg/l	87.1
Cadmium , Total as Cd	0.2	ug/l	<0.11
Nickel , Total as Ni	50	ug/l	<1.5
Naphthalene	1	ug/l	<0.05
Pentachlorophenol	1	ug/l	<0.05
March			
Sample collection date	08/03/2023		
Suspended solids	40	mg/l	10.8
pH	>6 - <9	pH units	7.7
Ammoniacal Nitrogen as N	2.1	mg/l	0.74
Chloride as Cl	221	mg/l	107
Cadmium , Total as Cd	0.2	ug/l	<0.11
Nickel , Total as Ni	50	ug/l	<1.5
Naphthalene	1	ug/l	<0.05
Pentachlorophenol	1	ug/l	<0.05
Quarterly			
Dissolved Oxygen, Fixed	not set	mg/l	11.5
pH	>6 - <9	pH units	8.5
Conductivity- Electrical 20C	not set	uS/cm	11.6
Suspended solids	40	mg/l	11.9
Ammoniacal Nitrogen as N	2.1	mg/l	9.0
BOD + ATU (5 day)	not set	mg/l	7.6
COD (Total)	not set	mg/l	7.8
Chloride as Cl	221	mg/l	341
			730
			351
			349
			448
			<1.5
			14
			<1.5
			2.8
			4.4
			0.01
			<0.01
			1.2
			1.5
			2.8
			1.2
			1.5
			<2
			4
			58.7
			87.1
			49.0
			49.6
			25.5
Six monthly			
Alkalinity as CaCO3	not set	mg/l	66.4
Sulphate as SO4	not set	mg/l	213
Calcium , Total as Ca	not set	mg/l	50.8
Sodium , Total as Na	not set	mg/l	102
Potassium , Total as K	not set	mg/l	33.2
Magnesium , Total as Mg	not set	mg/l	31.6
Iron , Total as Fe	not set	ug/l	32.9
Manganese , Total as Mn	not set	ug/l	25.1
Cadmium , Total as Cd	not set	ug/l	2.1
Mercury , Total as Hg	not set	ug/l	13.0
Chromium , Total as Cr	not set	ug/l	2.2
Copper , Total as Cu	not set	ug/l	3.9
Lead , Total as Pb	not set	ug/l	4.0
Nickel , Total as Ni	not set	ug/l	97.9
Zinc , Total as Zn	not set	ug/l	416
Total cyanides	not set	mg/l	11.3
TPH	not set	mg/l	80.2
Total phenols	not set	mg/l	11.3
TOC as C	not set	mg/l	8.7
Nitrogen , Total Oxidised as N	not set	mg/l	8.7
			<4.1
			8.8
			<4.1
			<4.1
			<4.1
			<1.5
			<1.5
			<1.5
			12.6
			5.3
			15.8
			30.9
			<1.1
			<0.05
			<0.05
			<0.05
			<0.05
			<0.2
			<0.2
			0.02
			0.01
			0.06
			0.48
			<0.02
			28.9
			0.7
			1.9
			23.9
			1.4
			0.82
			1.7
			2.9
			1.2

[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 uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed ...Guy Titman.....

Date...25.04.2023.....

(Authorised to sign as representative of Operator)

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Reporting of emissions to water (other than to sewer) for the period from			Quarter 1	01 January - 31 March		2023	
Emission Point	Substance /Parameter	Emission Limit Value/Unit	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
CWMS02	Water Level	m	Spot Sample		Methods used shall be in accordance with Agency guidance document 'Guidance on monitoring of landfill leachate, groundwater and surface water (LFTGN02)	10/01/2023	Accuracy of testing equipment
						03/02/2023	
						08/03/2023	
CWMS02	Discharge volume	m ³	Spot Sample			10/01/2023	
						03/02/2023	
						08/03/2023	
CWMS02	Flow Rate	m ³ /hr	Spot Sample	0.00		10/01/2023	
				0.00		03/02/2023	
				0.00		08/03/2023	

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Signed ...Guy Titman.....

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