Permit Number:	TP3835LV	
Operator:	SI Green UK Limited	
Installation:	Cwmrhydyceirw Quarry	

Schedule 4 - Emissions and monitoring

Table S4.5 and Table 4a from the Updated Management Report dated January 2021

Reporting of emissions to water (other than to sewer) for the period from

01 October - 31 December	Quarter 4	2021

Groundwater monitoring borehole			**CWMGW01**	**CWMGW03**	**CWMGW04**	**CWMGW06a**	**CWMGW07A**	**CWMGW07B**	**CWMGW08**	**CWMGW09**
Monthly		**Units**								
Water level	October	**mAOD**	Decomissioned	35.31	38.10	Decomissioned	Decomissioned	Decomissioned	34.88	36.46
Water level	November	**mAOD**		35.96	37.98				33.58	36.25
Water level	December	**mAOD**		35.25	38.29				33.79	36.54
Sample collection date				**31/11/2021**	**31/11/2021**				**31/11/2021**	**31/11/2021**
Analyte	**Emission limit value**	**Units**								
Quarterly										
pH	>6 - <9	pH units	Decomissioned	7.5	7.5	Decomissioned	Decomissioned	Decomissioned	7.4	7.2
Ammoniacal Nitrogen as N	393	mg/l		0.12	0.01				0.47	<0.01
Chloride as Cl	11900	mg/l		15	35.8				14.3	15.4
Dissolved Oxygen, Fixed	not set	mg/l		2.8	4				2.1	3.3
Conductivity- Electrical 20C	not set	uS/cm		437	511				547	615
Nickel , Total as Ni	2600	ug/l		<1.5	11.6				<1.5	<1.5
Cadmium , Total as Cd	75	ug/l		<0.11	<0.11				<0.11	<0.11
Copper , Total as Cu	not set	ug/l		<0.8	4.1				<0.8	<0.8
Alkalinity as CaCO3	not set	mg/l		194	203				261	260
Manganese , Total as Mn	not set	ug/l		17.7	315				807	83.5
Iron, Total as Fe	not set	ug/l		21.6	86.4				234	25
Zinc , Total as Zn	not set	ug/l		<1.1	3.2				<1.1	<1.1
Lead , Total as Pb	not set	ug/l		<4.1	6.2				<4.1	<4.1
Chromium , Total as Cr	not set	ug/l		<1.0	<1.0				<1.0	<1.0
Six monthly										
Sodium , Total as Na		mg/l	Decomissioned	11.4	19.9	Decomissioned	Decomissioned	Decomissioned	15.8	11.9
Potassium , Total as K		mg/l		3.5	5.1				3.2	3.4
TOC as C		mg/l		23.4	28.9				25.7	13.4
Calcium , Total as Ca		mg/l		50.2	58.3				69.7	69.7
Magnesium, Total as Mg		mg/l		20.7	19.3				21.1	35
Sulphate as SO4		mg/l		30.5	29.5				30.9	66.5
Nitrogen, Total Oxidised as N		mg/l		<0.07	<0.07				<0.07	0.12
Mercury, Total as Hg		ug/l		<0.05	<0.05				<0.05	<0.05
Annual										
Hazardous substances			Decomissioned			Decomissioned	Decomissioned	Decomissioned		
Fluoride		mg/l		0.38	0.14				0.1	0.11
Arsenic		ug/l		<0.20	0.32				0.87	0.21
Selenium		ug/l		<0.50	<0.50				<0.50	<0.50
Antimony		ug/l		<0.50	<0.50				<0.50	<0.50
Tellurium		ug/l		<1.0	<1.0				<1.0	<1.0
Thallium		ug/l		<1.0	<1.0				<1.0	<1.0
Uranium		ug/l		<1.0	<1.0				<1.0	<1.0
Naphthalene		ug/l		<0.05	<0.05				<0.05	<0.05
TPH		mg/l		<0.20	<0.20				0.4	<0.20
Mecoprop		ug/l		<0.1	<0.1				<0.1	<0.1
Phenol		ug/l		<0.50	<0.50				<0.50	<0.50
2-chlorophenol		ug/l		<0.50	<0.50				<0.50	<0.50
2-methylphenol		ug/l		<0.50	<0.50				<0.50	<0.50
4-methylphenol		ug/l		<0.50	<0.50				<0.50	<0.50
2 nitrophenol		ug/l		<0.50	<0.50				<0.50	<0.50
2,4-dimethylphenol		ug/l		<0.50	<0.50				<0.50	<0.50
2,4-dichlorophenol		ug/l		<0.50	<0.50				<0.50	<0.50
2,6-dichlorophenol		ug/l		<0.50	<0.50				<0.50	<0.50
4-chloro,3-methylphenol		ug/l		<0.50	<0.50				<0.50	<0.50
2,4,6-trichlorophenol		ug/l		<0.50	<0.50				<0.50	<0.50
2,4,5-trichlorophenol		ug/l		<0.50	<0.50				<0.50	<0.50
Acenaphthylene		ug/l		<0.05	<0.05				<0.05	<0.05
Acenaphthene		ug/l		<0.05	<0.05				<0.05	<0.05
4-nitrophenol		ug/l		<0.50	<0.50				<0.50	<0.50
2,3,4,6-tetrachlorophenol		ug/l		<0.50	<0.50				<0.50	<0.50
Fluorene		ug/l		<0.05	<0.05				<0.05	<0.05
Pentachlorophenol		ug/l		<0.50	<0.50				<0.50	<0.50
Phenanthrene		ug/l		<0.05	<0.05				<0.05	<0.05
Anthracene		ug/l		<0.05	<0.05				<0.05	<0.05
Fluoranthene		ug/l		<0.05	<0.05				<0.05	<0.05
Pyrene		ug/l		<0.05	<0.05				<0.05	<0.05
Benza(a)anthracene		ug/l		<0.05	<0.05				<0.05	<0.05
Chrysene		ug/l		<0.05	<0.05				<0.05	<0.05
Benzo(b)fluoranthene		ug/l		<0.05	<0.05				<0.05	<0.05
Benzo(a)pyrene		ug/l		<0.05	<0.05				<0.05	<0.05
Indeno(123-cd)pyrene		ug/l		<0.05	<0.05				<0.05	<0.05
Dibenza(ah)anthracene		ug/l		<0.05	<0.05				<0.05	<0.05
Benzo(ghi)perylene		ug/l		<0.05	<0.05				<0.05	<0.05
Alpha-BHC		ug/l		<0.20	<0.20				<0.20	<0.20
Beta-BHC		ug/l		<0.20	<0.20				<0.20	<0.20
Gamma-BHC		ug/l		<0.20	<0.20				<0.20	<0.20
Delta-BHC		ug/l		<0.20	<0.20				<0.20	<0.20
Heptachlor		ug/l		<0.20	<0.20				<0.20	<0.20
Aldrin		ug/l		<0.20	<0.20				<0.20	<0.20
Heptachlor Epoxide		ug/l		<0.20	<0.20				<0.20	<0.20
Endosulphan		ug/l		<0.20	<0.20				<0.20	<0.20
pp-DDE		ug/l		<0.20	<0.20				<0.20	<0.20
Dieidrin		ug/l		<0.20	<0.20				<0.20	<0.20
Endosulphan-I		ug/l		<0.20	<0.20				<0.20	<0.20
pp-DDD		ug/l		<0.20	<0.20				<0.20	<0.20
Endrin Aldehyde		ug/l		<0.20	<0.20				<0.20	<0.20
Endosulphan Sulphate		ug/l		<0.20	<0.20				<0.20	<0.20
pp-DDT		ug/l		<0.20	<0.20				<0.20	<0.20
Endrin Ketone		ug/l		<0.20	<0.20				<0.20	<0.20
Methoxychlor		ug/l		<0.20	<0.20				<0.20	<0.20
Ametryn		ug/l		<0.20	<0.20				<0.20	<0.20
Atraton		ug/l		<0.20	<0.20				<0.20	<0.20
Atrazine		ug/l		<0.20	<0.20				<0.20	<0.20
Bromacil		ug/l		<0.20	<0.20				<0.20	<0.20
Butachlor		ug/l		<0.20	<0.20				<0.20	<0.20
Butylate		ug/l		<0.20	<0.20				<0.20	<0.20
Chlorpropham		ug/l		<0.20	<0.20				<0.20	<0.20
Cycloate		ug/l		<0.20	<0.20				<0.20	<0.20
Devrinon		ug/l		<0.20	<0.20				<0.20	<0.20
Diazinon		ug/l		<0.20	<0.20				<0.20	<0.20
Dichlorvos		ug/l		<0.20	<0.20				<0.20	<0.20
Dimethyl-p		ug/l		<0.20	<0.20				<0.20	<0.20
Nitrophenylphosphate		ug/l		<0.20	<0.20				<0.20	<0.20
Diphenamid		ug/l		<0.20	<0.20				<0.20	<0.20
Disulfoton Sulfone		ug/l		<0.20	<0.20				<0.20	<0.20
EPTC		ug/l		<0.20	<0.20				<0.20	<0.20
Metolachlor		ug/l		<0.20	<0.20				<0.20	<0.20
Metribuzin		ug/l		<0.20	<0.20				<0.20	<0.20
Mevinphos		ug/l		<0.20	<0.20				<0.20	<0.20
MGK		ug/l		<0.20	<0.20				<0.20	<0.20
Molinate		ug/l		<0.20	<0.20				<0.20	<0.20
Pebulate		ug/l		<0.20	<0.20				<0.20	<0.20
Prometon		ug/l		<0.20	<0.20				<0.20	<0.20
Prometryne		ug/l		<0.20	<0.20				<0.20	<0.20
Propazine		ug/l		<0.20	<0.20				<0.20	<0.20

Permit Number:	TP3835LV	
Operator:	SI Green UK Limited	
Installation:	Cwmrhydyceirw Quarry	
Schedule 4 - Emissions and monitoring		
Table S4.5 and Table 4a from the Updated Management Report dated January 2021		
Reporting of emissions to water (other than to sewer) for the period from		
01 October - 31 December	Quarter 4	2021

Groundwater monitoring borehole			**CWMGW10**	**CWMGW11**	**CWMGW12**	**LFG2**	**LFG6**	**LFG9**	**LFG12BG**
Monthly		**Units**							
Water level	October	**mAOD**	43.65	39.55	35.39	49.15	53.74	38.28	39.18
Water level	November	**mAOD**	43.59	39.50	45.28	49.33	53.71	38.22	39.05
Water level	December	**mAOD**	43.56	39.64	45.56	48.84	53.55	37.56	38.94
Sample collection date			**31/11/2021**	**31/11/2021**	**31/11/2021**	**31/11/2021**	**31/11/2021**	**31/11/2021**	**31/11/2021**
Analyte	**Emission limit value**	**Units**							
Quarterly									
pH	>6 - <9	pH units	7.8	7.6	7.7	7.6	7	6.9	6.9
Ammoniacal Nitrogen as N	393	mg/l	0.15	<0.01	<0.01	<0.01	0.13	<0.01	<0.01
Chloride as Cl	11900	mg/l	17.4	51.4	26.7	12.1	16	28.9	25.5
Dissolved Oxygen, Fixed	not set	mg/l	1.3	3.6	2.3	1.7	1.8	3.8	6.6
Conductivity- Electrical 20C	not set	uS/cm	617	819	513	572	268	408	289
Nickel , Total as Ni	2600	ug/l	6.5	5.2	<1.5	3.2	2.5	3.4	<1.5
Cadmium , Total as Cd	75	ug/l	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
Copper , Total as Cu	not set	ug/l	1.2	1.8	<0.8	10.5	<0.8	2.4	<0.8
Alkalinity as CaCO3	not set	mg/l	270	267	323	263	109	144	94.6
Manganese , Total as Mn	not set	ug/l	878	126	180	170	497	413	19.4
Iron, Total as Fe	not set	ug/l	8.6	<0.8	15.9	62.8	122	197	45.1
Zinc , Total as Zn	not set	ug/l	<1.1	<1.1	<1.1	17.8	<1.1	1.4	<1.1
Lead , Total as Pb	not set	ug/l	<4.1	<4.1	<4.1	4.9	<4.1	<4.1	<4.1
Chromium , Total as Cr	not set	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	2.4	3
Six monthly									
Sodium , Total as Na		mg/l	10.5	17.5	12	9	10	14.7	14.6
Potassium , Total as K		mg/l	4.2	4.5	2.9	12.4	2.1	3.6	1.3
TOC as C		mg/l	46.7	23.8	22.9	20.7	22.1	24.5	22.6
Calcium , Total as Ca		mg/l	85.3	134	66.1	96.4	32.6	44	33
Magnesium, Total as Mg		mg/l	26.5	19.3	21.4	10.2	8.5	15.5	8.1
Sulphate as SO4		mg/l	60.5	97	24.4	45.4	15.3	30.3	19
Nitrogen, Total Oxidised as N		mg/l	<0.07	0.25	0.41	0.51	<0.07	0.6	0.64
Mercury, Total as Hg		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Annual									
Hazardous substances									
Fluoride		mg/l	0.1	0.1	0.12	0.47	0.19	0.16	0.13
Arsenic		ug/l	0.85	0.51	0.26	1.4	0.23	0.3	<0.20
Selenium		ug/l	0.81	0.95	<0.50	<0.50	<0.50	<0.50	<0.50
Antimony		ug/l	<0.50	<0.50	<0.50	3.6	<0.50	<0.50	<0.50
Tellurium		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Thallium		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Uranium		ug/l	<1.0	1	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
TPH		mg/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Mecoprop		ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenol		ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2-chlorophenol		ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2-methylphenol		ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
4-methylphenol		ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2 nitrophenol		ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2,4-dimethylphenol		ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2,4-dichlorophenol		ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2,6-dichlorophenol		ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
4-chloro,3-methylphenol		ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2,4,6-trichlorophenol		ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2,4,5-trichlorophenol		ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Acenaphthylene		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
4-nitrophenol		ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2,3,4,6-tetrachlorophenol		ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Fluorene		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pentachlorophenol		ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Phenanthrene		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benza(a)anthracene		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(123-cd)pyrene		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenza(ah)anthracene		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(ghi)perylene		ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Alpha-BHC		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Beta-BHC		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Gamma-BHC		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Delta-BHC		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Heptachlor		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Aldrin		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Heptachlor Epoxide		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Endosulphan		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pp-DDE		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dieidrin		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Endosulphan-I		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pp-DDD		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Endrin Aldehyde		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Endosulphan Sulphate		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pp-DDT		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Endrin Ketone		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methoxychlor		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Ametryn		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Atraton		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Atrazine		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromacil		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Butachlor		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Butylate		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chlorpropham		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Cycloate		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Devrinon		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Diazinon		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorvos		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dimethyl-p		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nitrophenylphosphate		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Diphenamid		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Disulfoton Sulfone		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
EPTC		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Metolachlor		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Metribuzin		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Mevinphos		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MGK		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Molinate		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Pebulate		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Prometon		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Prometryne		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Propazine		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Permit Number:	TP3835LV
Operator:	SI Green UK Limited
Installation:	Cwmrhydyceirw Quarry

Schedule 4 - Emissions and monitoring

Table S4.5 and Table 4a from the Updated Management Report dated January 2021

Reporting of emissions to water (other than to sewer) for the period from

01 October - 31 December	Quarter 4	2021

Groundwater monitoring borehole			**CWMGW01**	**CWMGW03**	**CWMGW04**	**CWMGW06a**	**CWMGW07A**	**CWMGW07B**	**CWMGW08**	**CWMGW09**
Monthly		**Units**								
Water level	October	**mAOD**	Decomissioned	35.31	38.10	Decomissioned	Decomissioned	Decomissioned	34.88	36.46
Water level	November	**mAOD**		35.96	37.98				33.58	36.25
Water level	December	**mAOD**		35.25	38.29				33.79	36.54
Sample collection date				**31/11/2021**	**31/11/2021**				**31/11/2021**	**31/11/2021**
Analyte	**Emission limit value**	**Units**								
Prophos		ug/l	Decomissioned	<0.20	<0.20	Decomissioned	Decomissioned	Decomissioned	<0.20	<0.20
Propyzamide		ug/l		<0.20	<0.20				<0.20	<0.20
Simazine		ug/l		<0.20	<0.20				<0.20	<0.20
Simetryn		ug/l		<0.20	<0.20				<0.20	<0.20
Terbacil		ug/l		<0.20	<0.20				<0.20	<0.20
Terbufos		ug/l		<0.20	<0.20				<0.20	<0.20
Terbutryne		ug/l		<0.20	<0.20				<0.20	<0.20
Tributylphosphoro-trithioite		ug/l		<0.20	<0.20				<0.20	<0.20
Vernolate		ug/l		<0.20	<0.20				<0.20	<0.20
Organotin (Total as TBTO)		ug/l		<0.050	<0.050				<0.050	<0.050
Dichlorodifluoromethane		ug/l		<1.0	<1.0				<1.0	<1.0
Chloromethane		ug/l		<1.0	<1.0				<1.0	<1.0
Vinyl Chloride		ug/l		<1.0	<1.0				<1.0	<1.0
Bromomethane		ug/l		<5	<5				<5	<5
Chloroethane		ug/l		<2.0	<2.0				<2.0	<2.0
Trichlorofluoromethane		ug/l		<1.0	<1.0				<1.0	<1.0
1,1-Dichloroethene		ug/l		<1.0	<1.0				<1.0	<1.0
Trans 1,2-Dichloroethene		ug/l		<1.0	<1.0				<1.0	<1.0
1,1-Dichloroethane		ug/l		<1.0	<1.0				<1.0	<1.0
Cis 1,2-Dichloroethene		ug/l		<1.0	<1.0				<1.0	<1.0
Bromochloromethane		ug/l		<5	<5				<5	<5
Trichloromethane		ug/l		<1.0	<1.0				<1.0	<1.0
1,1,1-Trichloroethane		ug/l		<1.0	<1.0				<1.0	<1.0
Tetrachloromethane		ug/l		<1.0	<1.0				<1.0	<1.0
1,1-Dichloropropene		ug/l		<1.0	<1.0				<1.0	<1.0
Benzene		ug/l		<1.0	<1.0				<1.0	<1.0
1,2-Dichloroethane		ug/l		<2.0	<2.0				<2.0	<2.0
Trichloroethene		ug/l		<1.0	<1.0				<1.0	<1.0
1,2-Dichloropropane		ug/l		<1.0	<1.0				<1.0	<1.0
Dibromomethane		ug/l		<10	<10				<10	<10
Bromodichloromethane		ug/l		<5	<5				<5	<5
cis-1,3-Dichloropropene		ug/l		<10	<10				<10	<10
Toluene		ug/l		<1.0	<1.0				<1.0	<1.0
Trans-1,3-Dichloropropene		ug/l		<10	<10				<10	<10
1,1,2-Trichloroethane		ug/l		<10	<10				<10	<10
Tetrachloroethene		ug/l		<1.0	<1.0				<1.0	<1.0
1,3-Dichloropropane		ug/l		<2.0	<2.0				<2.0	<2.0
Dibromochloromethane		ug/l		<10	<10				<10	<10
1,2-Dibromoethane		ug/l		<5	<5				<5	<5
Chlorobenzene		ug/l		<1.0	<1.0				<1.0	<1.0
1,1,1,2-Tetrachloroethane		ug/l		<2.0	<2.0				<2.0	<2.0
Ethylbenzene		ug/l		<1.0	<1.0				<1.0	<1.0
m&p-Xylene		ug/l		<1.0	<1.0				<1.0	<1.0
o-Xylene		ug/l		<1.0	<1.0				<1.0	<1.0
Styrene		ug/l		<1.0	<1.0				<1.0	<1.0
Tribromomethane		ug/l		<1.0	<1.0				<1.0	<1.0
Isopropylbenzene		ug/l		<1.0	<1.0				<1.0	<1.0
Bromobenzene		ug/l		<1.0	<1.0				<1.0	<1.0
1,2,3-Trichloropropane		ug/l		<1.0	<1.0				<1.0	<1.0
N-Propylbenzene		ug/l		<1.0	<1.0				<1.0	<1.0
2-Chlorotoluene		ug/l		<1.0	<1.0				<1.0	<1.0
1,3,5-Trimethylbenzene		ug/l		<50	<50				<50	<50
4-Chlorotoluene		ug/l		<1.0	<1.0				<1.0	<1.0
Tert-Butylbenzene		ug/l		<1.0	<1.0				<1.0	<1.0
1,2,4-Trimethylbenzene		ug/l		<1.0	<1.0				<1.0	<1.0
Sec-butylbenzene		ug/l		<1.0	<1.0				<1.0	<1.0
1,3-Dichlorobenzene		ug/l		<1.0	<1.0				<1.0	<1.0
4-Isopropyltoluene		ug/l		<1.0	<1.0				<1.0	<1.0
1,4-Dichlorobenzene		ug/l		<1.0	<1.0				<1.0	<1.0
N-Butylbenzene		ug/l		<1.0	<1.0				<1.0	<1.0
1,2-Dichlorobenzene		ug/l		<1.0	<1.0				<1.0	<1.0
1,2-Dibromo-3-Chloropropane		ug/l		<50	<50				<50	<50
1,2,4-Trichlorobnzene		ug/l		<1.0	<1.0				<1.0	<1.0
Hexachlorobutadiene		ug/l		<1.0	<1.0				<1.0	<1.0
1,2,3-Trichlorobenzene		ug/l		<2.0	<2.0				<2.0	<2.0
Methyl Tert-Butyl Ether		ug/l		<1.0	<1.0				<1.0	<1.0
PCB 28		ug/l		<0.010	<0.010				<0.010	<0.010
PCB 52		ug/l		<0.010	<0.010				<0.010	<0.010
PCB 90 + 101		ug/l		<0.010	<0.010				<0.010	<0.010
PCB 118		ug/l		<0.010	<0.010				<0.010	<0.010
PCB 153		ug/l		<0.010	<0.010				<0.010	<0.010
PCB 138		ug/l		<0.010	<0.010				<0.010	<0.010
PCB 180		ug/l		<0.010	<0.010				<0.010	<0.010
Total PCBs (7 Congeners)		ug/l		<0.10	<0.10				<0.10	<0.10

[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

[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

[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 …Beth Jones……..
Date…01.02.2022……..
(Authorised to sign as representative of Operator)

Permit Number:	TP3835LV	
Operator:	SI Green UK Limited	
Installation:	Cwmrhydyceirw Quarry	
Schedule 4 - Emissions and monitoring		
Table S4.5 and Table 4a from the Updated Management Report dated January 2021		
Reporting of emissions to water (other than to sewer) for the period from		
01 October - 31 December	Quarter 4	2021

Groundwater monitoring borehole			**CWMGW10**	**CWMGW11**	**CWMGW12**	**LFG2**	**LFG6**	**LFG9**	**LFG12BG**
Monthly		**Units**							
Water level	October	**mAOD**	43.65	39.55	35.39	49.15	53.74	38.28	39.18
Water level	November	**mAOD**	43.59	39.50	45.28	49.33	53.71	38.22	39.05
Water level	December	**mAOD**	43.56	39.64	45.56	48.84	53.55	37.56	38.94
Sample collection date			**31/11/2021**	**31/11/2021**	**31/11/2021**	**31/11/2021**	**31/11/2021**	**31/11/2021**	**31/11/2021**
Analyte	**Emission limit value**	**Units**							
Prophos		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Propyzamide		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Simazine		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Simetryn		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Terbacil		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Terbufos		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Terbutryne		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tributylphosphoro-trithioite		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vernolate		ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Organotin (Total as TBTO)		ug/l	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dichlorodifluoromethane		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane		ug/l	<5	<5	<5	<5	<5	<5	<5
Chloroethane		ug/l	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichlorofluoromethane		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trans 1,2-Dichloroethene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cis 1,2-Dichloroethene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromochloromethane		ug/l	<5	<5	<5	<5	<5	<5	<5
Trichloromethane		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloromethane		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloropropene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane		ug/l	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichloroethene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromomethane		ug/l	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane		ug/l	<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene		ug/l	<10	<10	<10	<10	<10	<10	<10
Toluene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trans-1,3-Dichloropropene		ug/l	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane		ug/l	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichloropropane		ug/l	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibromochloromethane		ug/l	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromoethane		ug/l	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane		ug/l	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m&p-Xylene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o-Xylene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tribromomethane		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropylbenzene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromobenzene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichloropropane		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
N-Propylbenzene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Chlorotoluene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene		ug/l	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tert-Butylbenzene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Sec-butylbenzene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4-Isopropyltoluene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
N-Butylbenzene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromo-3-Chloropropane		ug/l	<50	<50	<50	<50	<50	<50	<50
1,2,4-Trichlorobnzene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Hexachlorobutadiene		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene		ug/l	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methyl Tert-Butyl Ether		ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
PCB 28		ug/l	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
PCB 52		ug/l	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
PCB 90 + 101		ug/l	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
PCB 118		ug/l	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
PCB 153		ug/l	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
PCB 138		ug/l	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
PCB 180		ug/l	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total PCBs (7 Congeners)		ug/l	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

[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

[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

[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 …Beth Jones……..
Date…01.02.2022……..
(Authorised to sign as representative of Operator)