

Level of Assessment	STAGE 2			STAGE 3a- Dilution at source area through surrounding clean zone								STAGE 3B- Dilution of contaminant concentration through St.Bees Sandstone Infiltration											
Analyte	Measured Concentration (µg/L)	Marine EOS Screening Value (µg/L)	Value used	Type of contamination	Location	Depth of sample (m)	Estimated catchment area of contamination (m²)	Estimated catchment area of clean water (m²)	Total catchment (m²)	Percentage of Contaminated Catchment Infiltrating Total Catchment	Resultant simulated concentration as analyte enters Evaporites (µg/L)	Rainfall (m/day)	Infiltration into Source Zone and Clean Zone around Source (%)	Effective Rainfall (m/day)	Area of Source and Clean Zone Around Source (m2)	Discharge Contribution from onsite source zone and dilution zone (L/day)	Infiltration into St.Bees Sandstone (%)	Effective Rainfall (m/day)	Length of St.Bees Dilution Zone (m)	Width of St.Bees Dilution Zone (m)	Discharge Contribution from St.Bees Dilution Zone (L/day)	Dilution Factor	Concentration after Dilution of Clean St.Bees Water (µg/L)
Chromium	25	15	MAX	Soil leachate hotspot	TP624A	0.35	350	1150	1500	23.33%	5.83	0.0029	15%	0.0004	1500	660	7.5%	0.0002	301	39	2563	0.26	1.5
Zinc	55	40	MAX	Soil leachate hotspot	WS115	1.8	350	950	1300	27%	14.81	0.0029	15%	0.0004	1300	572	7.5%	0.0002	300	36	2378	0.24	3.56
Fluoranthene	1	0.2	MAX	Soil leachate hotspot	TP602A	0.5	950	1350	2300	41%	0.41	0.0029	15%	0.0004	2300	1011	7.5%	0.0002	300	48	3163	0.32	0.132
Carbazole	7	3.36	MAX	Soil leachate hotspot	TP602A	0.2, 0.5	500	1000	1500	33%	2.33	0.0029	15%	0.0004	1500	660	7.5%	0.0002	300	39	2555	0.26	0.602
Naphthalene	8	5	MAX	Soil leachate hotspot	TP624A	0.2, 0.5	500	1000	1500	33.33%	2.67	0.0029	15%	0.0004	1500	660	7.5%	0.0002	300	39	2555	0.26	0.69

* Pore water concentration calculated from concentration measured in soil
Exceedence of Controlled Waters Screening Criteria