

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 on (µg/L)	Marine EQS 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)	Rainfall (m/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)
TPH Aliphatic 21-35	100	10	MAX	Soil leachate hotspot	TP628A	1.7	300	800	1100	27.27%	27.3	0.0029	15%	0.0004	1100	484	0.0029	7.5%	0.0002	300	33	2188	0.22	6.0
TPH Aliphatic 21-35	40	10	MAX	Soil leachate hotspot	TP630A	0.5	200	600	800	25.00%	10.0	0.0029	15%	0.0004	800	352	0.0029	7.5%	0.0002	300	28	1866	0.19	1.9
TPH Aromatic 16-21	38	10	MAX	Soil leachate hotspot	TP624A	1	250	1000	1250	20.00%	7.6	0.0029	15%	0.0004	1250	550	0.0029	7.5%	0.0002	300	35	2332	0.24	1.8
TPH Aliphatic 16-21	22	10	MAX	Soil leachate hotspot	TP624A	1	250	1000	1250	20.00%	4.4	0.0029	15%	0.0004	1250	550	0.0029	7.5%	0.0002	300	35	2332	0.24	1.0
TPH Aliphatic 21-35	47	10	MAX	Soil leachate hotspot	TP624A	1	250	1000	1250	20.00%	9.4	0.0029	15%	0.0004	1250	550	0.0029	7.5%	0.0002	300	35	2332	0.24	2.2
Fluoranthene	1	0.2	MAX	Soil leachate hotspot	TP602A	0.6	300	400	700	43%	0.43	0.0029	15%	0.0004	700	308	0.0029	7.5%	0.0002	300	26	1745	0.18	0.076
Benzo (a) anthracene	0.108	0.092	MAX	Groundwater hotspot	WS115	water	1500	0	1500	100%	0.11	0.0029	15%	0.0004	1500	660	0.0029	7.5%	0.0002	300	39	2555	0.26	0.028
Benzo (a) pyrene	0.021	0.01	MAX	Groundwater hotspot	WS115	water	1500	0	1500	100%	0.02	0.0029	15%	0.0004	1500	660	0.0029	7.5%	0.0002	300	39	2555	0.26	0.005
Fluoranthene	0.7	0.2	MAX	Groundwater hotspot	WS115	water	1500	0	1500	100%	0.70	0.0029	15%	0.0004	1500	660	0.0029	7.5%	0.0002	300	39	2555	0.26	0.181
Naphthalene	49	5	MAX	Groundwater hotspot	WS115	water	1500	0	1500	100%	49	0.0029	15%	0.0004	1500	660	0.0029	7.5%	0.0002	300	39	2555	0.26	12.7
Zinc	83	40	MAX	Groundwater hotspot	WS115	water	1500	0	1500	100%	83	0.0029	15%	0.0004	1500	660	0.0029	7.5%	0.0002	300	39	2555	0.26	21.4
Cyanide	1670	50	MAX	Groundwater hotspot	WS115	water	1500	0	1500	100%	1670	0.0029	15%	0.0004	1500	660	0.0029	7.5%	0.0002	300	39	2555	0.26	431

Exceedance of Controlled Waters Screening Criteria