RECEIVED: 29/05/2024

Figure 9.3 - Surface Water Hydrochemistry Database.

Sample Details		LIMITS re EIA (Ref. NRA) Indicative Limits Re.: Bathing, Drinking Surface Water reg's.										
Sample ID			SW1	SW1	SW2	SW2	SW3	SW3	SW4	SW4	WCC7	WCC8
Project COC Reference			604008/604009 (C0C1)	604008/604009 (C0C2)	604008/604009 (C0C1)	604008/604009 (C0C2)	604008/604009 (C0C1)	604008/604009 (C0C2)	604008/604009 (C0C1)	604008/604009 (C0C2)	604008/604009 (C0C2)	604008/604009 (C0C2)
Sample Type	*Medum*		Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Date Sampled	*dd/mm/yyyy*		13/09/2022	25/10/2022	13/09/2022	25/10/2022	13/09/2022	25/10/2022	13/09/2022	25/10/2022	22/11/2023	22/11/2023
Grid Reference for Sampling Location	*ITM*		E502561.35N657988.57	E502561.35N657988.57	E500407.61N657995.05	E500407.61N657995.05	E498270.21N658418.01	E498270.21N658418.01	E497383.71N658734.21	E497383.71N658734.21	E501972.67N659231.86	E505159.74N659754.73
Field Data Discharge Data												
Surface Water Feature	*Type*		N/A	River	River	River	River	River	River	River	Stream	Stream
Description of sample location	*Type*		N/A	Bridge on road	Bridge on road	Bridge on road	Bridge on road	Bridge on road	Bridge on road	Bridge on road	Bridge on road	Bridge on road
Width of Water Body	*m*		N/A	3 metres	1.5 metres	1.5 metres	4.5 metres	4.5 metres	3 metres	3 metres	1 metre	0.8 metre
Depth (d)	*m*		N/A	0.5 metres	0.6 metres		0.8 metres		0.3 metres		0.8 metre	0.5 metre
Total Rain 3 Days Prior	*mm/72hours*		N/A	18mm	16.4mm	18mm	16.4mm	18mm	16.4mm	18mm		
Field Data												
Clarity			N/A	Clear	Cloudy	Clear	Cloudy	Clear	Cloudy	Clear	Clear	Clear
Colour			N/A	Brown	Brown	Brown	Yellow tint	Brown	Yellow	Brown Tint	Yellow tint	Golden
Odour			N/A	No odour	No odour	Earthy	Earthy	Earthy	Earthy	Earthy	No odour	No odour
pH	*pH Units*	>6 & <9	N/A	6.52	7.58	6.23	8.16	6.8	7.44	6.88	7.38	7.27
Conductivity	*mS/cm*	2.5	N/A	265	262	249	293	278	440	291	220	217
Temperature	*deg. C*	21.5	N/A	12.6	18.5	13.3	16.9	13.4	18.7	13.6	14	10.9
Laboratory data												
Conductivity @ 20 deg.C	*mS/cm*	2.5	N/A	2.5	4.4	2.5	6	2.5	16	2.7		
pH	*pH Units*	>6 & <9	N/A	6.6	7.6	6.5	7.5	6.6	7.6	6.8		
Carbon, Organic (diss.filt)	*mg/l*		N/A	36	30	32	30	32	31	32		
Ammoniacal Nitrogen as N (low level)	*mg/l*	0.02	N/A	<0.050	<0.050	<0.050	0.058	<0.050	0.059	<0.050		
BOD, unfiltered	*mg/l*	3	N/A	<4.0	15	<4.0	27	<4.0	21	<4.0		
Nitrate as NO3	*mg/l*		N/A	0.9	<0.50	1.8	<0.50	1.5	<0.50	1.5		
Nitrite as NO2	*mg/l*	0.05	N/A	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020		
Nitrogen, Kjeldahl	*mg/l*		N/A	4.7	10	4	3.5	5.6	2.1	5.8		
OrthoPhosphate (P04)	*mg/l*		N/A	0.11	0.076	0.11	0.093	0.12	0.087	0.12		
Suspended solids, Total	*mg/l*	25	N/A	9	28	<5.0	23	7	21	<5.0		
Turbidity	*ntu*		N/A	470	7.7	2.1	5.9	1.7	4.9	2		
Copper (diss.filt)	*µg/l*	5	N/A	2.4	2.4	2.5	3	3.4	3.1	3.5		
Phosphorus (diss.filt)	*µg/l*		N/A	36	25	36	30	39	28	39		
Zinc (diss.filt)	*µg/l*		N/A	28	18	24	3	22	3	22		
Copper (tot.unfilt)	*µg/l*	2000	N/A	6.2	5.2	7.8	5	3.9	5.2	6.4		
Hardness, Total as CaCO3 unfiltered	*mg/l*		N/A	60	60	58	81	71	88	76		
Zinc (tot.unfilt)	*µg/l*	30	N/A	36	18	37	2.5	19	2.9	14		
TPH / Oil & Greases	*mg/l*	No Impact on Fish	N/A	<10	<10	<10	<10	<10	<10	<10		