



**Kings Forest MOD Attachment 10:  
Monitoring reports**

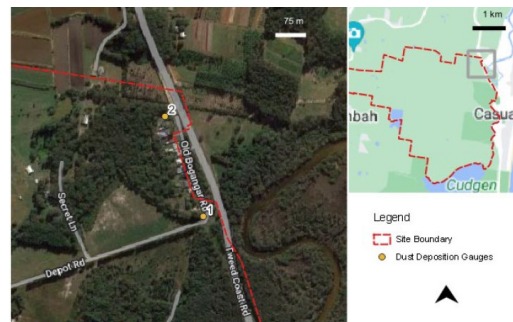
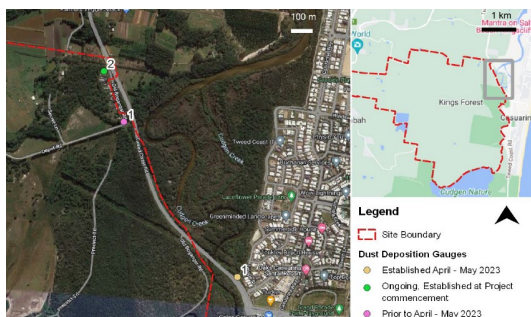
**March 2024**

Dust Monitoring Kings Forest -2022									
Period	Point	Ash	Combustible Solids (g/m2*month)	Combustible Solids (mg/m2*day)	Total Insoluble Solids (g/m2*month)	Total Insoluble Solids (mg/m2*day)	Soluble Soilds (g/m2*month)	Soluble Soilds (mg/m2*day)	Comments
Sep -Oct	DDG1	<0.1	<0.1	0	0.2	7	3.4	121	
Sep -Oct	DDG2	0.3	0.7	25	1	36	6.2	221	
Oct - Nov	DDG1	0.1	0.7	25	0.8	29	1.5	54	
Oct - Nov	DDG2	0.5	3.3	118	3.8	136	25	893	Total insolube solids is exceeded because the removal of the vegetation activities .
Nov- Dec	DDG1	0.3	3.4	121	3.6	129	8.8	314	Total insolube solids is exceeded because the removal of the vegetation activities .
Nov- Dec	DDG2	0.1	0.8	29	0.9	32	3.1	111	



Map 2 – Dust Gauge Locations

Dust Monitoring Kings Forest -2023									
Period	Point	Ash	Combustible Solids (g/m2*month)	Combustible Solids (mg/m2*day)	Total Insoluble Solids (g/m2*month)	Total Insoluble Solids (mg/m2*day)	Soluble Solids (g/m2*month)	Soluble Solids (mg/m2*day)	Comments
December - January	DDG1	0.3	2.1	75.00	2.4	85.71	4.5	160.71	
December - January	DDG2	0.1	0.5	17.86	0.6	21.43	0.6	21.43	
January - February	DDG1	1.3	1.4	50.00	2.7	96.43	4.1	146.43	
January - February	DDG2	0.4	0.5	17.86	0.9	32.14	1.4	50.00	
February - March	DDG1	0.2	2.8	100.00	3	107.14	5	214.29	Total insoluble solids is exceeded because the removal of the vegetation activities .
February - March	DDG2	<0.1	0.7	25.00	0.8	28.57	3.8	135.71	
March - April	DDG1b	<0.1	1.4	50.00	1.4	50.00	0.3	10.71	New location
March - April	DDG2	<0.1	0.4	14.29	0.4	14.29	<0.1	0.00	
April - May	DDG1b	0.1	1.4	50.00	1.5	53.57	1.5	53.57	
April - May	DDG2	0.2	1	35.71	1.1	39.29	3.3	117.86	
May - June	DDG1b	1.3	0.2	7.14	1.5	53.57	1.4	50.00	
May - June	DDG2	<0.1	<0.1	0.00	0.5	17.86	3.1	110.71	
June - July	DDG1b	1.4	0.3	10.71	1.1	39.29	1.1	39.29	
June - July	DDG2	1.4	0.2	7.14	1.6	57.14	<0.1	0.00	
July - August	DDG1b	1.5	<10	#VALUE!	2.1	75.00	<10	#VALUE!	Based on the results presented in this Report, this Program has not identified any negative long-term impacts to air quality due to Project works. The exceedance of insoluble solids in DDG 1 is unlikely to be a result of Project works because the wind during the reporting period was characterised by strong. DDG 1 is south of the Project so the air quality sample would be characteristic of areas south of DDG 1 and not from the Project, north of DDG 1.
July - August	DDG2	1.1	<10	#VALUE!	1.6	57.14	<10	#VALUE!	
August - Sept	DDG1b	0.5	0.4	14.29	0.9	32.14	0.4	14.29	Based on the results presented in this Report, this Program has not identified any negative long-term impacts to air quality due to Project works.
August - Sept	DDG2	1.1	<10	#VALUE!	1.6	57.14	<10	#VALUE!	
Sep - Oct	DDG1b	7.9	1.7	60.71	9.6	342.86	4.9	175.00	Based on the results presented in this Report, this Program has not identified any negative long-term impacts to air quality due to Project works so far. A short-term impact was identified with the exceedance in DDG 1b and the exceedance is attributable to project works – stormwater infrastructure was being constructed adjacent to DDG 1b during the reporting period.
Sep - Oct	DDG2	0.5	0.1	3.57	0.6	21.43	<0.1	#VALUE!	It is recommended that, when works are carried out near sensitive receivers such as residential neighbourhoods, additional dust suppression measures, such as utilising a water cart and sealing exposed surfaces with soil binder or similar, are implemented around DDG 1b because DDG 1b adjoins a residential neighbourhood. As previously, it is recommended that a minimum of three DDGs are used for an air monitoring program because three data points, at a minimum, are necessary to triangulate any contaminants, in this case dust plumes.
Oct - Nov	DDG1b	7.9	1.7	60.71	9.6	342.86	4.9	175.00	Based on the results presented in this Report, this Program has not identified any negative long-term impacts to air quality due to Project works so far. A short-term impact was identified with the exceedance in DDG 1b and the exceedance is attributable to project works – stormwater infrastructure was being constructed adjacent to DDG 1b during the reporting period.
Oct - Nov	DDG2	0.5	0.1	3.57	0.6	21.43	<0.1	#VALUE!	It is recommended that, when works are carried out near sensitive receivers such as residential neighbourhoods, additional dust suppression measures, such as utilising a water cart and sealing exposed surfaces with soil binder or similar, are implemented around DDG 1b because DDG 1b adjoins a residential neighbourhood. As previously, it is recommended that a minimum of three DDGs are used for an air monitoring program because three data points, at a minimum, are necessary to triangulate any contaminants, in this case dust plumes.
Nov-Dec	DDG1b	<0.1	1.7	60.71	1.8	64.29	5.5	196.43	
Nov-Dec	DDG2	<0.1	1.7	60.71	1.7	60.71	5.3	189.29	



Map 2 – Dust Gauge Locations



Groundwater Data (insitu) 2022							
Location	pH	EC	DO (mg/l)	Redox potential (mV)	Turbidity (NTU)	Temp (oC)	Oil/grease
		(µS/cm-1)					
<b>Aug-22</b>							
TSC16	6.39	88	37.99	86	136	17.3	Nil
TSC10	6.07	514	38.37	20	86.3	17.7	Nil
BH0911	5.02	42	32.03	80	1,560	16.9	Nil
BH0913	Bore destroyed						
BH0912	Water level too low to bail						
BH0910	4.53	74	43.99	284	180	16.6	Nil
BH099	6.94	84	33.21	184	112	18.6	Nil
BH098	Water level too low to bail						
BH091	No water in bore						
BH092	5.06	54	7.43	157	771	20	Nil
BH093	Bore destroyed						
BH094	Bore destroyed						
BH095	5.04	31	44.03	148	262	17.01	Nil
BH096	No water in bore						
BH097	5.43	79	12.6	206	Lab	20	Nil
BH1	5.6	105	25.59	68	1,990	18.6	Nil
BH2	5.47	47	11.89	127	590	18.1	Nil
BH3	Bore not found						
BH4	4.14	14	21.13	277	784	19.8	Nil
BH5	Bore destroyed						
<b>Sep-22</b>							
Location	pH	EC (µS/cm-1)	DO (mg/l)	Redox potential (mV)	Turbidity (NTU)	Temp (oC)	Oil/grease
TSC16	6	97	27.23	66	275	16.8	No
TSC10	6.77	603	34.7	-31	56.5	17.1	No
BH0911	4.55	391	30.24	96	ND	18.7	No
BH0913	Bore destroyed						
BH0912	Bore destroyed						
BH0910	4.47	77	24.7	254	65	18.3	No
BH099	4.16	110	3.61	167	67.2	18.8	No
BH098	Bore destroyed						
BH091	Bore destroyed						
BH092	5.12	57	11.42	171	356	18.8	No
BH093	Bore destroyed						
BH094	Bore destroyed						
BH095	5.57	70	17.57	19	153	18.9	No
BH096	Bore destroyed						
BH097	4.18	60	13.87	301	406	18.7	No
BH1	5.39	77	25.25	75	ND	18.4	No
BH2	4.94	47	21.97	133	ND	17.8	No
BH3	Bore destroyed						
BH4	4.43	2	26.88	125	364	16.5	No
BH5	Bore destroyed						
<b>Oct-22</b>							
Location	pH	EC (µS/cm-1)	Redox potential (mV)	Temp (°C)	Oil/grease	note: reduced parameters as per OWMP	
TSC16	Inaccessible due to flooding						
TSC10	7	486	215	21.5	N/A		
BH0910	3.65	88	189	21.9	N/A		
BH0911	Inaccessible due to flooding						
BH0912	destroyed						
BH0913	Not accessible due to BEW						
BH091	no water						
BH092	3.75	73	185	20.7	N/A		
BH093	destroyed						
BH094	destroyed						
BH095	3.37	58	-2	19.9	N/A		
BH096	water level too low						
BH097	3.22	52	206	20.6	N/A		
BH098	not accessible due to BEW						
BH099	destroyed						
BH1	3.1	87	7	19.5	N/A		
BH2	3.81	71	45	19.7	N/A		
BH3	Not accessible on other side of koala temporary fence						
BH4	3.06	108	204	20.4	N/A		
BH5	destroyed						
<b>Nov-22</b>							
Location	pH	EC (µS/cm-1)	Redox potential (mV)	Temp (°C)	Oil/grease		
TSC16	3.53	135	103	20.2	N/A		
TSC10	4.29	404	128	22.4	N/A		
BH0910	Bore destroyed						
BH0911	4.48	511	0.51	22	N/A		
BH0912	destroyed						
BH0913	Not accessible due to BEW						
BH091	no water						
BH092	4.34	74	14	22.6	N/A		
BH093	destroyed						
BH094	destroyed						
BH095	4.25	19	146	21.8	N/A		
BH096	water level too low						
BH097	4.55	63	169	23.1	N/A		
BH098	not accessible due to BEW						
BH099	destroyed						
BH1	4.67	86	-58	21.3	N/A		
BH2	4.53	78	-7	23.1	N/A		
BH3	Not accessible on other side of koala temporary fence						
BH4	4.04	150	216	25.3	N/A		
BH5	destroyed						
<b>Dec-22</b>							
Location	pH	EC (µS/cm-1)	Redox potential (mV)	Temp (°C)	Oil/grease		
TSC16	2.96	158	151	22.5	Nil		
TSC10	2.19	684	85	24.3	Nil		
BH0910	Not accessible due to BEW						
BH0911	4.03	361	56	26.6	biofilm		
BH0912	water level too low						
BH0913	destroyed						
BH091	dry						
BH092	3.56	472	154	24.6	Nil		
BH093	destroyed						
BH094	destroyed						
BH095	4.45	80	57	24.2	Nil		
BH096	water level too low						
BH097	3.6	80	232	23.9	Nil		
BH098	not accessible due to BEW						
BH099	destroyed						
BH1	4.23	38	58	23.9	Nil		
BH2	4.71	33	59	24.9	Nil		
BH3	on other side of koala fences						
BH4	filled with sediment						
BH5	destroyed						



Groundwater Data (Insitu) 2023					
Jan-23					
Location	pH	EC ( $\mu\text{S}/\text{cm}^{-1}$ )	Redox potential (mV)	Temp (°C)	Oil/grease
TSC16	3.49	146	150	22.6	N/A
TSC10	ND	726	152	24	N/A
BH0910	Not accessible due to BEW				
BH0911	4.04	423	61	25.8	N/A
BH0912	Water level too low				
BH0913	Destroyed				
BH091	Dry				
BH092	5.79	264	124	24.5	N/A
BH093	Destroyed				
BH094	Destroyed				
BH095	4.3	84	102	24.3	N/A
BH096	Water level too low				
BH097	4.62	114	152	23.7	N/A
BH098	Not accessible due to BEW				
BH099	destroyed				
BH1	4.36	118	67	23.5	N/A
BH2	4.44	91	70	25.4	N/A
BH3	On the other side of the Koala Fence				
BH4	Filled with sediment				
BH5	destroyed				
Feb-23					
Location	pH	EC ( $\mu\text{S}/\text{cm}^{-1}$ )	Redox potential (mV)	Temp (°C)	Oil/grease
TSC16	4.68	167	149	23.6	Nil
TSC10	3.72	944	204	25	Nil
BH0910	Not accessible due to BEW				
BH0911	4.99	482	96	26.2	Nil
BH0912	Dry				
BH0913	Destroyed				
BH091	Dry				
BH092	Not accessible due to BEW				
BH093	Destroyed				
BH094	Destroyed				
BH095	4.68	99	269	24.7	Nil
BH096	Dry				
BH097	3.69	140	377	26.9	Nil
BH098	Dry				
BH099	Destroyed				
BH1	5.12	129	101	23.8	Nil
BH2	5.2	103	132	25.7	Nil
BH3	On the other side of the Koala Fence				
BH4	Filled with sediment				
BH5	Destroyed				
Mar-23					
Location	pH	EC ( $\mu\text{S}/\text{cm}^{-1}$ )	Redox potential (mV)	Temp (°C)	Oil/grease
TSC16	4.68	167	149	23.6	Nil
TSC10	3.72	944	204	25.0	Nil
BH0910	Not accessible due to BEW				
BH0911	4.99	482	96	26.2	Nil
BH0912	Dry				
BH0913	Destroyed				
BH091	Dry				
BH092	Not accessible due to BEW				
BH093	Destroyed				
BH094	Destroyed				
BH095	4.68	99	269	24.7	Nil
BH096	Dry				
BH097	3.69	140	377	26.9	Nil
BH098	Dry				
BH099	Destroyed				
BH1	5.12	129	101	23.8	Nil
BH2	5.20	103	132	25.7	Nil
BH3	On the other side of the Koala Fence				
BH4	Filled with sediment				
BH5	Destroyed				
Apr-23					
Location	pH	EC ( $\mu\text{S}/\text{cm}^{-1}$ )	Redox potential (mV)	Temp (°C)	Oil/grease
TSC16	4.7	198	50	21.5	Nil
BH095	4.9	89	120	22.2	Nil
BH097	5.1	95	182	23.3	Nil
BH1	5.1	131	105	22.3	Nil
BH2	4.6	111	128	22.9	Nil
May-23					
Location	pH	EC ( $\mu\text{S}/\text{cm}^{-1}$ )	Redox potential (mV)	Temp (°C)	Oil/grease
TSC16	No access due to KFP works				
BH095	6.15	217	141	20.47	No
BH097	6.63	138	206 of Precinct 4 toxicology	19	No
BH1	6.95	121	107	21.66	No
BH2	6.95	121	107	21.66	No
Jun-23					
Location	pH	EC ( $\mu\text{S}/\text{cm}^{-1}$ )	Redox potential (mV)	Temp (°C)	Oil/grease
TSC16	4.7	7.2	41	19.1	No
BH095	4.9	7.5	50	18.6	No
BH1	4.7	6.3	64	20.7	No
BH2	5	6.3	83	19.7	No
Jul-23					
Location	pH	EC ( $\mu\text{S}/\text{cm}^{-1}$ )	Redox potential (mV)	Temp (°C)	Oil/grease
TSC16	4.76	127	-160	17.7	N/A
BH095	5.05	94	-75	17.99	N/A
BH1	5.04	63	-176	19.5	N/A
BH2	4.72	52	-122	19.1	N/A
Aug-23					
Location	pH	EC ( $\mu\text{S}/\text{cm}^{-1}$ )	Redox potential (mV)	Temp (°C)	Oil/grease
TSC16	4.78	59	135	17.9	N/A
BH095	5.42	157	214	18.9	N/A
BH1	5.14	63	102	19.8	N/A
BH2	4.79	42	149	18.9	N/A
Sep-23					
Location	pH	EC ( $\mu\text{S}/\text{cm}^{-1}$ )	Redox potential (mV)	Temp (°C)	Oil/grease
TSC16	4.87	84	106	17.8	N/A
BH095	5.28	108	221	19	N/A
BH1	5.12	48	110	19.6	N/A
BH2	4.9	52	165	18.8	N/A
Oct-23					
Location	pH	EC ( $\mu\text{S}/\text{cm}^{-1}$ )	Redox potential (mV)	Temp (°C)	Oil/grease
BH1	4.85	62	59	21.3	N/A
BH2	5.13	67	74	21.1	N/A
GW095	5.1	72	75	22.2	N/A
TSC16	4.64	86	89	19.7	N/A
Nov-23					
Location	pH	EC ( $\mu\text{S}/\text{cm}^{-1}$ )	Redox potential (mV)	Temp (°C)	Oil/grease
BH1	5.14	107	80	21.3	N/A
BH2	5.43	59	111	22.1	N/A
GW095	5.2	197	126	20.7	N/A
TSC16	5.23	73	90	20.9	N/A
Dec-23					
Location	pH	EC ( $\mu\text{S}/\text{cm}^{-1}$ )	Redox potential (mV)	Temp (°C)	Oil/grease
BH1	4.6	114	91	22.4	NA
BH2	4.9	150	140	23.1	NA
GW095	4.8	120	79	25.8	NA
TSC16	4.7	71	68	21.7	NA

Groundwater Data (Exit) 2023																																			
Month 20																																			
Borehole Locations:																																			
Parameter Tested:	TC10	TC11	SS1	SS2	SS3	SS4	SS5	SS6	SS7	SS8	SS9	SS10	SS11	SS12	SS13	SS14	SS15	SS16	SS17	SS18	SS19	SS20	SS21	SS22	SS23	SS24	SS25	SS26	SS27	SS28	SS29	SS30			
Arsenic-N (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Total Nitrogen (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total Phosphorus (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Iron (ppm) (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Ammonia (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Cadmium (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Copper (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Lead (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Zinc (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Chloride (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Fluoride (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Calcium (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnesium (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total Solids (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Water Hardness (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Water Hardness (ppm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: Indicated analysis parameters post DRG and TRC approval

## Groundwater Data (Insitu) 2024

Jan-24

Location	pH	EC ( $\mu\text{S}/\text{cm}^{-1}$ )	Redox potential (mV)	Temp ( $^{\circ}\text{C}$ )	Oil/grease
BH1	4.9	60	157	24.2	NA
BH2	4.8	118	127	22.9	NA
GW095	4.8	120	164	24.3	NA
TSC16	4.8	71	127	22.8	NA

**Groundwater Data (Exsitu) 2024**

Jan-24

Parameters Tested:	Borehole Locations:															Precinct 1				
	Precinct 5															Precinct 1				
	TSC10	TSC16	910	911	912	913	91	92	93	94	95	96	97	98	99	BH1	BH2	BH3	BH4	BH5
Ammonia-N (mg/L)	Not accessible	0.48	Dry	Destroyed	Water level too low	Destroyed	Dry	Inaccessible due to BEW	Destroyed	Destroyed	0.22	Dry	Buried under Precinct 4 stockpile	Dry	Inaccessible	1.08	0.53	On other side of koala fence	Filled with sediment – no water content	destroyed
Total Nitrogen (mg/L)	2.05	4.33									2.67									
Total Phosphorus-P (mg/L)	0.09	0.13									0.12									
Iron (Total) (mg/L)	0.98	2.12									0.76									
Iron (soluble) (mg/L)	0.82	0.51									0.32									
Aluminium (total) (mg/L)	1.05	3.63									1.78									
Aluminium (soluble) (mg/L)	0.58	0.25									0.36									
Arsenic (mg/L)	0.001	0.007									0.004									
Cadmium (mg/L)	<0.001	<0.001									<0.001									
Copper (mg/L)	0.02	0.033									0.005									
Lead (mg/L)	0.001	0.006									0.002									
Nickel (mg/L)	0.002	0.006									0.007									
Zinc (mg/L)	0.026	0.021									0.129									



















**Discharge to recharge trenches/zones**

All waters discharged from the excavation areas to recharge trenches or recharge zones during the construction phase should comply with the following criteria:

Water Quality Parameter	Release Criteria	
	Precinct 1	Precinct 5
pH	3.5-4.33	3.59-4.47
Oil and grease	No visible film, no detectable odour	No visible film, no detectable odour

**Discharge to surface water bodies**

Where the discharge of dewatered groundwater to on-site drains and waterways is intended, water quality will satisfy the relevant surface water quality criteria:

Surface water quality criteria			
Parameter	Saline (SW1, SW2, SW6, and SW9)	Brackish (SW5)	Fresh (SW3, SW4, SW7, SW8 and SW10)
pH	5.66-6.3	5.34-6.14	5.23-6.66
Electrical Conductivity	<38700 $\mu\text{s/cm}$	<4008.6 $\mu\text{s/cm}$	<230.4 $\mu\text{s/cm}$
Dissolved Oxygen	>7.10 mg/L	>4.87 mg/L	>2.91 mg/L
Turbidity	<3.1 mg/L	<23.76 mg/L	<32.54 mg/L
Total Nitrogen	<0.5 mg/L	<1 mg/L	<1.46 mg/L
Total Phosphorus	<0.03 mg/L	<0.04 mg/L	<0.14 mg/L
Iron (total)	<0.41 mg/L	<4.40 mg/L	<6.57 mg/L
Aluminium (total)	<0.22 mg/L	<0.36 mg/L	<0.68 mg/L
Chlorophyll-a	<6 $\mu\text{g/L}$	<6 $\mu\text{g/L}$	<6 $\mu\text{g/L}$
Litter and gross pollutants	No man made material <5mm in any dimension	No man made material <5mm in any dimension	No man made material <5mm in any dimension