



Baseline Water Quality Monitoring at Station E - Upstream Control Station at channelized nullah across the Project site

Station Reference	Sampling Date	Weather	Sampling Time	Sampling Depth	Temperature			pH			Salinity			DO Saturation			DO			Turbidity			SS	
					°C			-			ppt			%			mg/L			NTU			mg/L	
					Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value
Station E - Upstream Control Station at channelized nullah across the Project site	13/8/18	Fine	11:10	Surface	25.4	25.4	25.6	7.85	7.85	7.83	0.03	0.03	0.03	82.9	82.8	82.3	6.78	6.77	6.73	8.39	8.43	8.43	6.5	6.6
			11:12		25.8	25.8		7.80	7.80		0.03	0.03		82.3	81.3		6.73	6.64		8.45	8.44			
	15/8/18	Cloudy	10:10	Surface	25.7	25.7	25.9	7.62	7.62	7.58	0.03	0.03	0.03	81.9	83.5	81.4	6.69	6.81	6.63	21.75	21.71	21.71	5.1	5.7
			10:12		26.0	26.0		7.53	7.53		0.03	0.03		78.7	81.5		6.40	6.62		21.70	21.68			
	17/8/18	Rainy	9:40	Surface	24.7	24.7	24.8	7.53	7.50	7.52	0.02	0.02	0.02	75.5	75.2	75.5	6.26	6.25	6.26	129.00	129.70	129.90	194.9	175.8
			9:42		24.8	24.8		7.51	7.52		0.02	0.02		75.9	75.4		6.28	6.25		130.10	130.80			
	20/8/18	Rainy	10:17	Surface	24.8	24.8	25.0	6.70	6.69	6.59	0.02	0.02	0.02	81.1	79.2	80.2	6.71	6.55	6.62	14.03	14.04	14.00	8.7	8.4
			10:19		25.1	25.1		6.50	6.48		0.02	0.02		81.1	79.5		6.69	6.51		13.97	13.97			
	22/8/18	Cloudy	12:25	Surface	25.7	25.7	25.8	6.88	6.89	6.88	0.02	0.02	0.02	79.0	79.5	79.5	6.41	6.44	6.44	8.82	8.85	8.84	7.4	5.7
			12:27		25.9	25.9		6.87	6.87		0.02	0.02		80.1	79.5		6.47	6.42		8.86	8.81			
	24/8/18	Cloudy	12:06	Surface	25.3	25.3	25.4	7.11	7.11	7.10	0.02	0.02	0.02	81.7	81.2	81.7	6.69	6.64	6.68	15.90	15.87	15.87	14.7	10.3
			12:08		25.4	25.4		7.08	7.08		0.02	0.02		82.2	81.6		6.71	6.66		15.98	15.74			
	27/8/18	Rainy	10:43	Surface	25.0	25.0	25.1	7.93	7.91	7.92	0.02	0.02	0.02	77.7	76.5	77.1	6.41	6.31	6.36	19.94	19.98	20.00	5.4	5.6
			10:45		25.1	25.1		7.92	7.90		0.02	0.02		77.8	76.4		6.41	6.29		20.04	20.02			
	29/8/18	Cloudy	10:20	Surface	25.4	25.4	25.6	7.04	7.04	7.03	0.02	0.02	0.02	79.3	84.1	83.4	6.50	6.89	6.83	18.44	18.19	18.26	3.0	3.3
			10:22		25.7	25.7		7.01	7.01		0.02	0.02		85.1	85.1		6.96	6.96		18.13	18.29			
	31/8/18	Cloudy	13:57	Surface	24.8	24.8	24.8	6.87	6.84	6.85	0.02	0.02	0.02	81.8	81.0	81.4	6.77	6.70	6.72	8.01	7.95	7.99	4.3	4.3
			13:59		24.8	24.8		6.85	6.82		0.02	0.02		81.5	81.1		6.72	6.70		7.98	8.03			
	3/9/18	Cloudy	15:15	Surface	28.4	28.4	28.5	7.38	7.38	7.38	0.03	0.03	0.03	78.6	81.7	81.7	6.13	6.36	6.36	7.91	7.92	7.92	8.2	9.0
			15:17		28.5	28.5		7.39	7.38		0.03	0.03		83.4	83.0		6.49	6.45		7.92	7.92			
5/9/18	Cloudy	11:05	Surface	29.1	29.1	29.3	6.95	6.95	6.95	0.04	0.04	0.04	81.4	80.0	78.7	6.23	6.12	6.02	30.74	34.96	34.46	28.2	31.9	
		11:07		29.4	29.4		6.94	6.94		0.04	0.04		77.4	76.0		5.92	5.81		36.07	36.07				
7/9/18	Cloudy	12:50	Surface	26.1	26.1	26.3	7.96	7.96	7.95	0.02	0.02	0.02	75.3	78.7	75.6	6.08	6.35	6.10	9.39	9.39	9.39	4.1	4.3	
		12:51		26.4	26.4		7.94	7.94		0.02	0.02		75.3	73.0		6.07	5.89		9.38	9.38				

Action and Limit Level for Station E - Upstream Control Station at channelized nullah across the Project site

Parameter	Action Level	Limit Level
pH	-	-
DO (mg/L)	-	-
Turbidity (NTU)	-	-
SS (mg/L)	-	-

Remark: It is recommended that upstream monitoring station would be taken as control reference for exceedance investigation only. Action and limit level would not be establish using the baseline data.



Baseline Water Quality Monitoring at Station F - Downstream Impact Station at channelized nullah across the Project site

Station Reference	Sampling Date	Weather	Sampling Time	Sampling Depth	Temperature			pH			Salinity			DO Saturation			DO			Turbidity			SS	
					°C		Average	-		Average	ppt		Average	%		Average	mg/L		NTU		Average	mg/L		
					Value	Value		Value	Value		Value	Value		Value	Value		Value	Value	Value	Value		Value	Value	Value
Station F - Downstream Control Station at channelized nullah across the Project site	13/8/18	Fine	11:25	Surface	26.2	26.2	26.3	6.94	6.94	6.99	0.04	0.04	0.04	81.5	80.4	80.3	6.57	6.49	6.48	5.54	5.45	5.47	3.8	3.7
			11:27		26.4	26.4		7.04	7.04		0.04	0.04		80.3	79.1		6.48	6.38		5.44	5.44		3.5	
	15/8/18	Cloudy	10:20	Surface	25.6	25.6	25.7	6.24	6.24	6.48	0.04	0.04	0.04	83.2	83.4	83.6	6.79	6.81	6.82	9.72	9.72	9.72	2.7	3.0
			10:22		25.8	25.8		6.71	6.71		0.04	0.04		84.1	83.5		6.86	6.81		9.71	9.71		3.3	
	17/8/18	Rainy	11:25	Surface	24.5	24.5	24.5	6.91	6.90	6.86	0.03	0.03	0.03	75.2	75.2	76.8	6.28	6.29	6.41	34.93	34.93	34.79	26.2	25.6
			11:26		24.5	24.5		6.82	6.82		0.03	0.03		77.4	79.3		6.45	6.61		34.80	34.50		24.9	
	20/8/18	Rainy	12:30	Surface	25.7	25.7	25.8	6.36	6.35	6.41	0.03	0.03	0.04	83.9	83.9	83.2	6.83	6.83	6.76	8.92	8.91	8.87	6.3	6.3
			12:32		25.9	25.9		6.46	6.46		0.04	0.04		81.8	83.1		6.64	6.75		8.82	8.83		6.2	
	22/8/18	Cloudy	12:42	Surface	26.5	26.5	26.6	6.78	6.77	6.78	0.04	0.04	0.04	80.5	80.8	80.8	6.44	6.46	6.46	7.11	7.09	7.09	3.0	2.9
			12:44		26.6	26.6		6.78	6.79		0.04	0.04		81.2	80.7		6.49	6.44		7.11	7.04		2.7	
	24/8/18	Cloudy	12:25	Surface	25.6	25.6	25.7	7.03	7.03	7.02	0.05	0.05	0.05	82.3	81.8	82.2	6.66	6.61	6.66	5.44	5.51	5.46	2.7	3.0
			12:27		25.7	25.7		7.01	7.02		0.05	0.05		82.8	81.8		6.69	6.66		5.45	5.43		3.2	
	27/8/18	Rainy	11:50	Surface	25.4	25.4	25.5	7.55	7.55	7.50	0.05	0.05	0.05	80.2	80.0	78.8	6.58	6.56	6.46	6.79	6.79	6.78	8.1	5.4
			11:52		25.5	25.5		7.44	7.44		0.05	0.05		78.0	77.0		6.39	6.31		6.78	6.76		2.6	
	29/8/18	Cloudy	10:38	Surface	25.2	25.2	25.3	6.95	6.96	6.96	0.04	0.04	0.05	76.1	76.4	77.4	6.27	6.29	6.38	12.23	12.22	12.19	3.7	3.6
			10:40		25.3	25.3		6.97	6.97		0.07	0.04		78.1	79.1		6.43	6.51		12.18	12.14		3.5	
	31/8/18	Cloudy	14:14	Surface	24.9	24.9	24.9	6.62	6.61	6.63	0.04	0.04	0.04	81.6	81.2	81.3	6.75	6.71	6.72	14.07	14.09	14.07	9.1	8.5
			14:16		24.9	25.0		6.64	6.65		0.04	0.04		81.1	81.3		6.70	6.72		14.07	14.05		7.8	
	3/9/18	Cloudy	15:27	Surface	26.2	26.2	26.4	6.24	6.24	6.28	0.04	0.04	0.04	84.4	82.2	81.3	6.81	6.62	6.55	6.74	6.70	6.85	1.4	1.8
			15:29		26.6	26.6		6.32	6.32		0.04	0.04		80.6	77.9		6.49	6.26		6.90	7.07		2.2	
5/9/18	Cloudy	11:20	Surface	27.4	27.4	27.5	7.05	7.05	7.03	0.06	0.06	0.06	79.7	78.1	77.9	6.30	6.16	6.14	79.04	78.20	78.54	56.2	51.0	
		11:22		27.6	27.6		7.01	7.01		0.06	0.06		77.0	76.6		6.08	6.03		78.12	78.81		45.7		
7/9/18	Cloudy	12:40	Surface	27.4	27.4	27.5	8.41	8.41	8.38	0.07	0.07	0.07	69.0	68.0	68.4	5.45	5.36	5.40	7.73	7.74	7.73	1.7	1.9	
		12:41		27.6	27.6		8.34	8.34		0.07	0.07		67.7	68.8		5.35	5.43		7.73	7.73		2.0		

Action and Limit Level for Station F - Downstream Impact Station at channelized nullah across the Project site

Parameter	Action Level	Limit Level
pH	6.6-8.4	6.5-8.5
DO (mg/L)	5.8	5.5
Turbidity (NTU)	24.4	32.7
SS (mg/L)	17.0	23.8

Remark: Further reviewed the baseline water quality monitoring data, the SS and turbidity data recorded on 5 September 2018 would take as outliers to set the Action and Limit Level in order to establish the representative action and limit levels.



Baseline Water Quality Monitoring at Station H - Upstream Control Station at Ma Yau Tong Stream

Station Reference	Sampling Date	Weather	Sampling Time	Sampling Depth	Temperature °C			pH -			Salinity ppt				DO Saturation %				DO mg/L				Turbidity NTU			SS mg/L	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
Station H - Upstream Control Station at Ma Yau Tong Stream	13/8/18	Fine	15:25	Surface	28.2	28.2	28.3	7.54	7.54	7.42	0.10	0.10	0.10	80.8	80.8	79.9	6.29	6.29	6.22	193.10	193.40	193.43	127.9	120.2			
			15:27		28.4	28.4		7.30	7.30		0.10	0.10		78.5	79.6		6.11	6.19		193.60	193.60		112.5				
	15/8/18	Cloudy	13:40	Surface	27.2	27.2	27.4	7.58	7.58	7.57	0.11	0.11	0.11	80.6	80.8	80.2	6.37	6.38	4.83	61.21	61.38	61.46	22.7	24.1			
			13:42		27.6	27.6		7.56	7.56		0.11	0.11		80.4	79.1		0.34	6.24		61.58	61.66		25.5				
	17/8/18	Rainy	10:20	Surface	25.0	25.0	25.1	6.71	6.71	6.74	0.04	0.04	0.04	74.8	73.6	73.2	6.17	6.08	6.04	427.20	426.30	423.80	480.3	459.6			
			10:22		25.1	25.1		6.77	6.77		0.04	0.04		72.5	72.0		5.98	5.93		420.90	420.80		438.9				
	20/8/18	Rainy	12:55	Surface	26.4	26.4	26.5	8.22	8.21	8.23	0.08	0.08	0.08	81.3	81.0	81.0	6.53	6.51	6.50	393.40	393.10	392.95	442.1	439.1			
			12:57		26.6	26.6		8.24	8.24		0.08	0.08		80.8	81.0		6.48	6.49		392.80	392.50		436.0				
	22/8/18	Cloudy	12:00	Surface	27.8	27.8	27.9	7.21	7.21	7.19	0.12	0.12	0.12	79.3	78.7	79.1	6.20	6.15	6.18	53.22	53.22	53.26	25.8	23.0			
			12:02		27.9	27.9		7.17	7.17		0.12	0.12		79.9	78.5		6.23	6.12		53.31	53.28		20.1				
	24/8/18	Cloudy	11:40	Surface	27.2	27.2	27.3	7.83	7.82	7.82	0.09	0.09	0.09	81.3	81.8	81.5	6.44	6.48	6.45	309.90	309.90	310.00	251.1	254.5			
			11:42		27.4	27.4		7.82	7.80		0.09	0.09		82.1	80.9		6.49	6.40		310.40	309.80		257.9				
	27/8/18	Rainy	10:26	Surface	26.4	26.4	26.5	8.50	8.50	8.51	0.09	0.09	0.09	80.6	79.6	80.5	6.48	6.39	6.46	648.40	649.20	648.48	5921.5	5650.3			
			10:28		26.5	26.5		8.52	8.53		0.09	0.09		81.3	80.3		6.52	6.44		647.90	648.40		5379.0				
	29/8/18	Cloudy	9:50	Surface	25.8	25.8	25.9	7.38	7.38	7.38	0.09	0.09	0.09	88.1	87.7	87.4	7.16	7.12	7.10	69.34	69.32	69.32	58.5	59.7			
			9:52		26.0	26.0		7.37	7.37		0.09	0.09		87.3	86.4		7.09	7.02		69.31	69.30		60.8				
	31/8/18	Cloudy	13:41	Surface	25.9	25.9	26.0	7.20	7.21	0.00	0.09	0.09	0.09	82.4	81.6	81.9	6.68	6.62	6.64	23.30	23.91	23.66	19.7	23.2			
			13:43		26.0	26.0		7.24	7.24		0.09	0.09		82.0	81.4		6.64	6.60		23.72	23.69		26.7				
	3/9/18	Cloudy	15:48	Surface	76.4	76.4	51.6	6.52	6.52	6.57	0.08	0.08	0.08	83.3	83.1	82.5	6.68	6.66	6.61	22.04	22.17	21.65	16.3	17.4			
			15:50		26.8	26.8		6.61	6.61		0.08	0.08		82.1	81.6		6.58	6.53		21.17	21.20		18.4				
5/9/18	Cloudy	11:45	Surface	27.1	27.1	27.2	6.93	6.93	6.88	0.09	0.09	0.09	76.3	76.1	76.5	6.06	6.04	6.06	13.45	13.47	13.40	3.0	3.0				
		11:47		27.3	27.3		6.82	6.82		0.09	0.09		76.9	76.5		6.10	6.03		13.37	13.31		2.9					
7/9/18	Cloudy	12:10	Surface	28.2	28.2	27.9	8.18	8.18	8.26	0.14	0.14	0.11	76.1	75.2	72.0	5.92	5.85	5.64	7.52	7.50	7.62	4.7	3.4				
		12:12		27.6	27.6		8.34	8.34		0.07	0.07		67.7	68.8		5.35	5.43		7.73	7.73		2.0					

Action and Limit Level for Station H - Upstream Control Station at Ma Yau Tong Stream

Parameter	Action Level	Limit Level
pH	-	-
DO (mg/L)	-	-
Turbidity (NTU)	-	-
SS (mg/L)	-	-

Remark: It is recommended that upstream monitoring station would be taken as control reference for exceedance investigation only. Action and limit level would not be establish using the baseline data.



Baseline Water Quality Monitoring at Station I - Downstream Impact Station at Ma Yau Tong Stream

Station Reference	Sampling Date	Weather	Sampling Time	Sampling Depth	Temperature			pH			Salinity			DO Saturation			DO			Turbidity			SS	
					°C			-			ppt			%			mg/L			NTU			mg/L	
					Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value
Station I - Downstream Impact Station below the slope near Sau Mau Ping Rd	13/8/18	Fine	15:50	Surface	28.2	28.2	28.3	7.08	7.08	7.08	0.12	0.12	0.12	81.0	80.9	80.0	6.30	6.30	6.23	64.03	64.22	64.32	38.6	39.6
			15:52		28.4	28.4		7.07	7.07		0.12	79.2		78.7	6.20		6.12	64.44		64.57	40.6			
	15/8/18	Cloudy	14:05	Surface	27.7	27.7	27.9	7.15	7.15	7.18	0.12	0.12	0.12	79.3	80.0	78.6	6.22	6.27	6.16	26.00	26.79	26.65	11.6	11.5
			14:07		28.0	28.0		7.20	7.20		0.12	78.1		76.8	6.12		6.02	26.89		26.93	11.4			
	17/8/18	Rainy	10:45	Surface	25.5	25.5	25.5	6.81	6.81	6.81	0.05	0.05	0.05	80.9	80.2	80.6	6.62	6.57	6.60	197.40	197.40	197.63	120.2	137.1
			10:47		25.5	25.5		6.81	6.81		0.05	81.0		80.2	6.63		6.56	197.10		198.60	153.9			
	20/8/18	Rainy	13:26	Surface	27.2	27.2	27.3	7.66	7.66	7.64	0.09	0.09	0.09	82.2	81.7	81.8	6.52	6.48	6.48	219.90	218.60	216.08	230.8	208.5
			13:28		27.3	27.3		7.62	7.61		0.09	80.9		82.4	6.38		6.53	213.00		212.80	186.2			
	22/8/18	Cloudy	11:30	Surface	28.9	28.9	29.0	7.32	7.32	7.33	0.12	0.12	0.12	74.8	73.6	74.8	5.74	5.65	5.73	49.21	49.14	49.15	10.3	10.8
			11:32		29.0	29.0		7.34	7.34		0.12	75.4		75.2	5.77		5.75	49.17		49.07	11.2			
	24/8/18	Cloudy	11:10	Surface	27.2	27.2	27.3	7.33	7.31	7.32	0.11	0.11	0.11	76.7	76.6	76.8	6.07	6.06	6.08	82.48	81.97	82.27	49.3	44.0
			11:12		27.3	27.3		7.32	7.31		0.11	76.8		77.2	6.07		6.10	82.28		82.34	38.6			
	27/8/18	Rainy	10:00	Surface	26.4	26.4	26.5	7.78	7.78	7.78	0.09	0.09	0.09	82.9	81.3	80.7	6.67	6.54	6.49	890.00	895.00	894.00	769.0	748.5
			10:02		26.5	26.5		7.77	7.77		0.09	78.4		80.2	6.30		6.45	895.00		896.00	728.0			
	29/8/18	Cloudy	9:15	Surface	26.0	26.0	26.1	7.66	7.66	7.67	0.09	0.09	0.09	84.0	84.4	82.9	6.81	6.84	6.72	13.53	13.51	13.57	5.4	6.5
			9:17		26.1	26.1		7.67	7.67		0.09	82.4		80.6	6.68		6.53	13.59		13.66	7.6			
	31/8/18	Cloudy	13:16	Surface	26.4	26.4	26.5	7.77	7.78	7.76	0.19	0.19	0.19	80.1	79.2	80.1	6.43	6.35	6.39	13.22	13.23	13.23	9.1	9.6
			13:18		26.5	26.5		7.72	7.75		0.19	81.1		79.8	6.50		6.29	13.20		13.25	10.0			
	3/9/18	Cloudy	16:10	Surface	27.3	27.3	27.4	6.63	6.63	6.69	0.10	0.10	0.10	80.9	82.2	81.2	6.40	6.50	6.42	18.16	18.02	17.99	6.7	6.9
			16:12		27.5	27.5		6.74	6.74		0.10	81.5		80.0	6.44		6.32	17.85		17.92	7.1			
5/9/18	Cloudy	12:05	Surface	27.4	27.4	27.6	6.86	6.86	6.88	0.10	0.10	0.10	67.9	71.1	71.8	5.35	5.60	5.65	10.74	10.92	10.93	2.3	2.4	
		12:07		27.7	27.7		6.90	6.90		0.10	74.1		74.1	5.83		5.83	11.01		11.04	2.5				
7/9/18	Cloudy	11:54	Surface	28.9	28.9	28.3	8.52	8.52	8.43	1.13	1.13	0.60	72.2	70.3	69.8	5.52	5.37	5.42	7.64	7.65	7.69	2.3	2.2	
		11:55		27.6	27.6		8.34	8.34		0.07	67.7		68.8	5.35		5.43	7.73		7.73	2.0				

Action and Limit Level for Station I - Downstream Impact Station at Ma Yau Tong Stream

Parameter	Action Level	Limit Level
pH	6.6-8.4	6.5-8.5
DO (mg/L)	5.5	5.4
Turbidity (NTU)	206.9	214.2
SS (mg/L)	172.8	201.4

Remark: Further reviewed the baseline water quality monitoring data, the SS and turbidity data recorded on 27 August 2018 would take as outliers to set the Action and Limit Level in order to establish the representative action and limit levels.