

ANNEX J

MARINE WATER QUALITY MONITORING RESULTS FOR SILT CURTAIN PILOT TEST

Pilot Test Water Quality Data Log Sheet

Date: 2021/08/26

Round: 1

Jetting Work Rate: 29.08 m/hr

Tidal State: Flood tide

Monitoring Station	Weather Condition	Sea Condition**	Sampling Time	Water Depth	Depth Level ***	Current Velocity (m/s)	Current Direction	Temperature (°C)		Salinity (ppt)		pH		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity (NTU)			Suspended Solids (mg/L)					
								Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*		
A1	Cloudy	Calm	07:39	19.0	S	0.26	248	27.78	27.79	27.86	27.88	8.00	8.02	105.5	105.9	7.10	7.12	6.04	17.5	17.4	195.5	6.8	6.6	10,322.0		
						0.49	296	27.80		27.89		8.04		106.2		7.14			17.2							
						0.62	252	26.04	30.39	7.88	73.0	72.5	4.99	53.9												
					M	0.62	252	26.08	26.06	30.40	7.89	71.9	4.91	54.8	54.4	419.3	514.8	31,700	30,950							
						0.37	345	24.56		33.02	7.90	57.6	3.97	610.2												
						0.37	345	24.81		33.01	7.91	48.1	3.31	30,200												
B1	Cloudy	Calm	08:06	18.5	S	0.28	184	28.09	28.09	27.82	27.86	8.27	8.30	123.5	126.2	8.27	8.45	5.90	0.8	0.8	5.9	2.6	2.6	8.0		
						0.40	346	28.09		27.89		8.32		128.9		8.63			0.7							
						0.25	335	25.47	25.51	31.40	7.96	47.3	3.24	2.2												
					M	0.25	335	25.54		31.36	7.96	50.7	3.47	2.0	2.1											
						0.33	77	23.59		23.59	34.14	7.98	39.6	2.76	15.2											
						B	0.33	77	23.59		34.13	7.96	37.4	2.61	14.7	17.7										
0.13	183	23.57	23.57	34.16	8.01		39.7	2.77	13.4																	
B2	Cloudy	Calm		08:17	19.2		S	0.63	27	28.13	28.14	27.55	27.58	8.28	8.32	120.0	124.2	8.04	8.32	5.70	0.7	0.7	5.6	3.2	3.4	9.3
						0.63		27	28.14	27.60		8.35		128.3		8.59		0.6								
			0.54			283		25.44	25.27	31.43	7.98	45.7	3.13	2.5												
			M			0.12	130	25.09		32.21	7.95	44.2	3.04	2.1	2.3											
						0.13	183	23.57		34.16	8.01	39.7	2.77	19.8												
						B	0.13	183	23.57	23.57	34.16	8.00	37.7	2.63	2.70	2.70	14.5	14.0	20.4							
B3	Cloudy	Calm	07:55	19.0	S		0.31	355	27.92		28.00	28.62	28.47	8.24	8.27	121.5	125.8	8.12	8.41	5.92	0.9	0.9	25.1	3.4	3.4	79.6
							0.31	355	28.08			28.31		8.30		130.1		8.69			0.8					
						0.17	196	25.56	25.57	31.24	7.95	47.7	3.27	3.4												
					M	0.52	231	25.57		31.24	7.95	52.6	3.60	2.2	2.8											
						0.09	338	23.61		23.61	34.04	7.94	38.1	2.66	79.0											
						B	0.24	225	23.60		34.05	7.94	36.5	2.55	64.3	71.7										
0.39	325	28.18	28.17	27.62	8.27		117.0	7.83	0.7																	
B4	Cloudy	Calm		08:29	19.2		S	0.39	325	28.15	28.17	27.69	27.66	8.33	8.30	128.5	122.8	8.60	8.22	5.49	0.8	0.8	6.1	3.3	3.5	10.5
			0.60			34		24.38	24.39	33.33		7.97		39.7		2.74		2.5								
			0.60			34		24.40		33.32	7.97	40.2	2.78	2.1	2.3											
			M			0.12	327	23.58		23.58	34.17	8.03	42.5	2.96	14.1											
						B	0.40	0	23.57		34.17	8.00	38.5	2.68	16.3	15.2										
							0.12	327	23.58		34.17	8.03	42.5	2.96	23.6											
0.40	0	23.57	34.17	8.00	38.5		2.68	24.0	23.8																	

Remark: * DA: Depth-Averaged

** Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

*** S: 1 m below the sea surface; M: mid-depth; S: 1 m above the seabed

Pilot Test Water Quality Data Log Sheet

Date: 2021/08/26

Round: 2

Jetting Work Rate: 29.08 m/hr

Tidal State: Flood tide

Monitoring Station	Weather Condition	Sea Condition**	Sampling Time	Water Depth	Depth Level ***	Current Velocity (m/s)		Temperature (°C)		Salinity (ppt)		pH		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity (NTU)			Suspended Solids (mg/L)					
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*		
A1	Cloudy	Calm	10:01	19.6	S	0.62	13	28.77	28.82	27.97	27.99	8.07	8.10	120.4	121.45	7.96	8.03	6.46	36.5	36.8	503.0	9.8	10.0	8,207.5		
						0.10	72	28.86		28.01		8.13		122.5		8.09			37.0			10.2				
						0.62	13	25.74		33.19		7.88		73.6		4.97			50.7			52.5				
					M	0.24	12	25.87	33.19	7.89	71.2	4.80	54.2	52.5	4.36	4.36	1,419.4	1,419.8	14,100	24,600	35,100	12.8	12.5	14,100	24,600	
						0.62	13	25.48	33.86	8.13	69.3	4.69	14,100													24,600
						0.62	13	25.54	33.96	8.05	59.7	4.03	1,420.2													1,419.8
B1	Cloudy	Calm	10:18	19.4	S	0.40	288	28.48	28.47	27.94	27.96	8.30	8.33	130.5	134.75	8.67	8.96	5.86	0.8	0.8	6.9	2.8	2.6	9.9		
						0.31	61	28.45		27.97		8.35		139.0		9.24			0.7			2.4				
						0.20	154	24.14		33.61		7.97		40.0		2.77			3.1			3.6				
					M	0.31	14	24.14	33.62	7.96	40.0	2.77	2.7	2.9	2.76	2.76	16.3	17.0	23.3	23.7	23.3	23.7				
						0.22	275	23.49	34.24	7.99	40.2	2.81	24.0	23.7												
						0.22	275	23.49	34.24	7.97	38.8	2.71	17.7	23.3												
B2	Cloudy	Calm	10:27	19.8	S	0.14	317	28.33	28.39	27.94	27.80	8.31	8.34	132.5	136.10	8.83	9.07	5.96	0.8	0.8	6.0	2.7	2.9	9.2		
						0.14	317	28.45		27.66		8.37		139.7		9.30			0.7			3.0				
						0.35	301	23.81		33.97		7.97		41.0		2.85			4.3			4.6				
					M	0.33	187	23.87	33.89	7.97	41.3	2.87	4.8	4.6	2.89	2.89	13.6	14.4	19.8	20.2	20.5	20.2				
						0.11	21	23.49	34.26	8.02	42.9	2.99	13.6	14.4												
						0.11	21	23.48	34.25	7.99	39.9	2.79	15.1	14.4												
B3	Cloudy	Calm	10:09	19.5	S	0.47	321	28.08	28.07	28.70	28.70	8.26	8.29	132.6	137.30	8.83	9.15	5.95	0.9	0.9	7.4	4.0	4.3	11.9		
						0.47	321	28.06		28.70		8.32		142.0		9.46			4.5			4.3				
						0.49	327	24.04		33.73		7.95		39.5		2.74			6.6			6.8				
					M	0.39	196	24.04	33.73	7.94	39.7	2.75	7.0	6.8	2.81	2.81	16.9	18.0	24.6	24.7	24.6	24.7				
						0.09	101	23.50	34.22	7.97	41.2	2.88	24.7	24.7												
						0.09	101	23.50	34.22	7.96	39.2	2.74	19.1	18.0												
B4	Cloudy	Calm	10:38	19.3	S	0.50	38	28.49	28.48	27.74	27.76	8.29	8.33	126.1	133.60	8.39	8.89	5.85	0.7	0.7	6.1	3.2	3.0	8.8		
						0.29	225	28.47		27.77		8.37		141.1		9.39			2.8			3.0				
						0.24	270	24.03		33.75		7.97		40.3		2.79			4.0			3.8				
					M	0.24	270	24.01	33.77	7.97	41.0	2.84	3.5	3.8	2.88	2.88	13.5	14.9	19.4	19.5	19.4	19.5				
						0.06	5	23.50	34.25	8.02	43.1	3.01	13.5	14.9												
						0.06	5	23.50	34.24	7.99	39.2	2.74	16.3	14.9												

Remark: * DA: Depth-Averaged

** Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

*** S: 1 m below the sea surface; M: mid-depth; S: 1 m above the seabed

Pilot Test Water Quality Data Log Sheet

Date: 2021/08/26

Round: 3

Jetting Work Rate: 29.08 m/hr

Tidal State: Ebb tide

Monitoring Station	Weather Condition	Sea Condition**	Sampling Time	Water Depth	Depth Level ***	Current Velocity (m/s)		Temperature (°C)		Salinity (ppt)		pH		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity (NTU)			Suspended Solids (mg/L)		
						Value	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
A1	Fine	Calm	13:42	19.2	S	0.42	209	29.90	29.93	13.55	13.56	8.07	8.10	119.8	121.15	8.42	8.51	6.79	52.2	52.0	260.6	10.1	9.9	679.7
						0.42	209	29.96		13.56		8.12		122.5		8.60			51.8			9.7		
						0.80	147	28.24	28.33	30.86	30.86	7.93	7.94	78.0	77.40	5.12	5.08	44.6	48.1	14.2	14.1			
					M	0.80	147	28.41	27.44	30.86	7.94	7.94	76.8	77.40	5.03	5.08	51.6	681.7	13.9	14.1	2,015			
						0.35	163	27.42	27.83	27.83	8.24	8.29	134.6	142.05	8.86	9.35	700.4	662.9	2,030	2,015				
						0.13	106	27.46	27.83	27.83	8.24	8.29	134.6	142.05	8.86	9.35	662.9	2,000	2,015					
B1	Fine	Calm	13:52	19.0	S	0.26	133	29.14	29.14	27.83	27.83	8.24	8.29	134.6	142.05	8.86	9.35	5.93	1.1	1.0	28.0	6.9	6.8	32.1
						0.06	258	29.13		27.83		8.34		149.5		9.84			0.9			6.7		
						0.18	173	23.84	23.89	33.83	33.80	7.87	7.87	36.2	36.10	2.52	2.51	2.9	2.6	7.6	7.5			
					M	0.23	22	23.94	23.54	33.76	33.80	7.87	7.87	36.0	36.10	2.50	2.51	2.3	2.6	7.4	7.5			
						0.09	240	23.54	34.08	34.09	7.87	7.87	35.2	34.35	2.46	2.40	85.6	80.3	82.2	82.0				
						0.09	240	23.53	34.09	34.09	7.86	7.87	33.5	34.35	2.34	2.40	75.0	80.3	81.8	82.0				
B2	Fine	Calm	14:12	19.2	S	0.23	122	29.06	28.83	27.91	28.10	8.24	8.29	132.8	142.25	8.74	9.39	5.95	0.8	0.9	10.3	6.2	6.0	43.9
						0.31	89	28.60		28.29		8.33		151.7		10.04			0.9			5.8		
						0.14	107	24.13	24.15	33.58	33.56	7.90	7.90	36.1	36.25	2.50	2.51	2.8	2.7	7.5	7.7			
					M	0.28	274	24.16	23.53	33.54	33.56	7.89	7.90	36.4	36.25	2.52	2.51	2.5	2.7	7.8	7.7			
						0.54	71	23.53	23.53	34.17	34.17	7.93	7.92	35.4	34.60	2.47	2.42	2.51	2.75	118.0	118.0			
						0.54	71	23.53	23.53	34.17	34.17	7.90	7.92	33.8	34.60	2.36	2.42	29.9	27.5	118.0	118.0			
B3	Fine	Calm	14:01	19.0	S	0.30	8	29.35	29.41	27.71	27.70	8.25	8.29	131.9	138.15	8.65	9.06	5.76	0.8	0.8	62.7	5.7	5.9	226.1
						0.30	8	29.46		27.68		8.32		144.4		9.46			0.7			6.1		
						0.33	136	23.94	23.88	33.79	33.86	7.91	7.91	35.3	35.50	2.45	2.47	2.9	2.8	7.3	7.5			
					M	0.33	136	23.81	23.54	33.92	33.86	7.90	7.91	35.7	35.50	2.48	2.47	2.6	2.8	7.7	7.5			
						0.23	331	23.54	23.54	34.13	34.14	7.97	7.96	36.7	34.80	2.56	2.43	188.1	184.5	666.0	665.0			
						0.23	331	23.54	23.54	34.14	34.14	7.94	7.96	32.9	34.80	2.30	2.43	180.8	184.5	664.0	665.0			
B4	Fine	Calm	14:22	19.1	S	0.59	34	29.68	29.70	27.63	27.64	8.26	8.29	134.2	138.75	8.76	9.06	5.78	0.9	0.9	4.8	4.3	4.5	9.5
						0.18	73	29.71		27.64		8.32		143.3		9.35			0.8			4.7		
						0.28	191	24.07	24.09	33.66	33.64	7.90	7.90	35.3	36.20	2.45	2.51	2.9	2.7	6.1	6.0			
					M	0.38	46	24.10	23.55	33.62	33.64	7.90	7.90	37.1	36.20	2.57	2.51	2.4	2.7	5.8	6.0			
						0.20	112	23.55	23.55	34.16	34.16	7.94	7.93	35.5	34.65	2.48	2.42	11.1	10.9	18.1	18.2			
						0.20	112	23.55	23.55	34.16	34.16	7.91	7.93	33.8	34.65	2.36	2.42	10.7	10.9	18.2	18.2			

Remark: * DA: Depth-Averaged

** Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

*** S: 1 m below the sea surface; M: mid-depth; S: 1 m above the seabed