

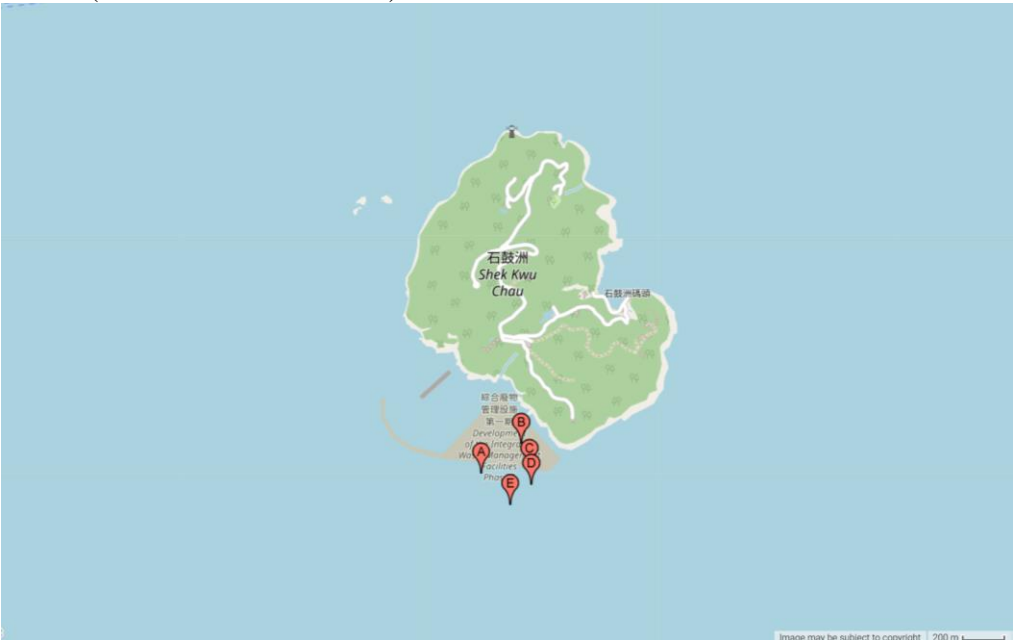
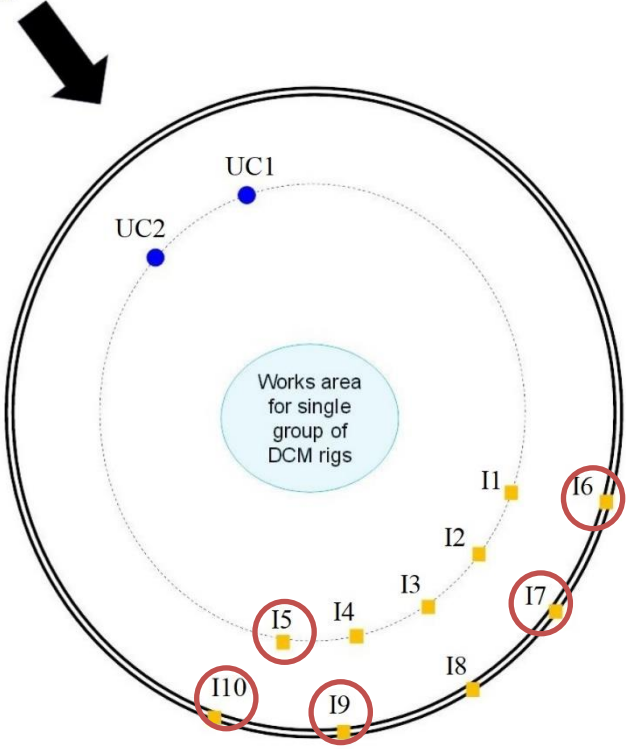
Appendix N Exceedance Report

Statistical Summary of Exceedances in the Reporting Period

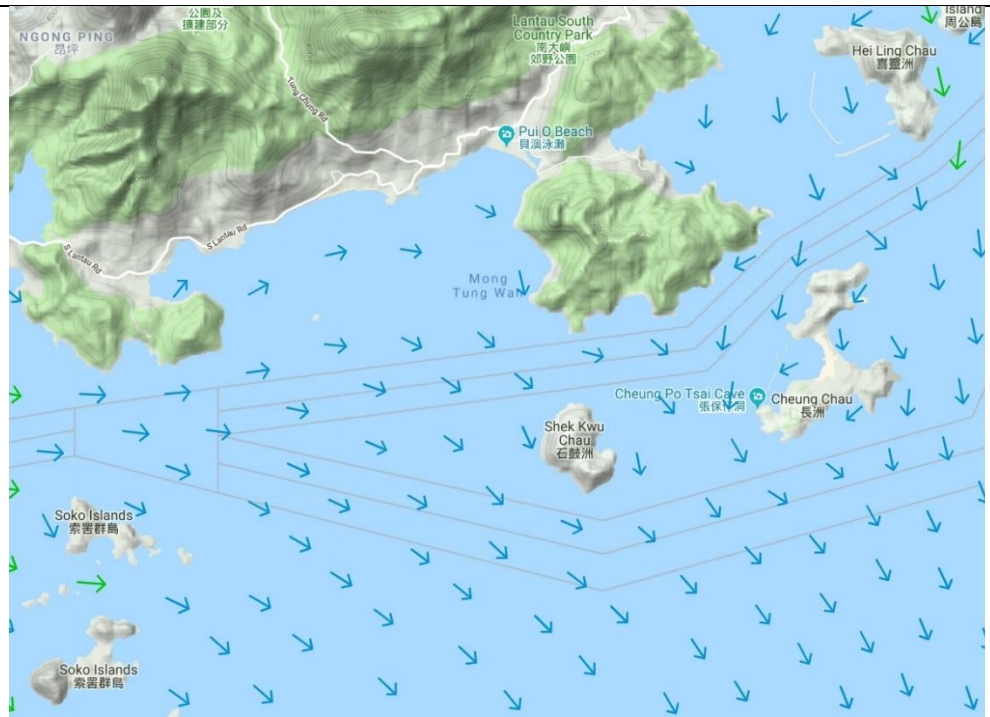
Water Quality			
Location	Action Level	Limit Level	Total
B1	0	1	1
B2	2	0	2
B3	1	1	2
B4	0	1	1
CR1	2	0	2
CR2	3	0	3
F1	3	0	3
H1	2	0	2
S1	1	0	1
S2	1	0	1
S3	3	0	3
M1	4	0	4
Water Quality (Intensive DCM)			
Location	Action Level	Limit Level	Total
I1	1	1	2
I2	1	2	3
I3	0	2	2
I4	1	2	3
I5	0	3	3
I6	0	3	3
I7	0	4	4
I8	0	4	4
I9	1	4	5
I10	2	3	5

Noise (Day Time)			
Location	Action Level	Limit Level	Total
M1 / N_S1	0	0	0
M2 / N_S2	0	0	0
M3 / N_S3	0	0	0
Noise (Evening Time)			
Location	Action Level	Limit Level	Total
M1 / N_S1	0	0	0
M2 / N_S2	0	0	0
M3 / N_S3	0	0	0
Noise (Night Time)			
Location	Action Level	Limit Level	Total
M1 / N_S1	0	0	0
M2 / N_S2	0	0	0
M3 / N_S3	0	0	0

Incident Report on Action Level or Limit Level Non-compliance

Project	Integrated Waste Management Facilities, Phase 1
Date	2 March 2019 (Lab result received on 6 March 2019)
Time	09:16 – 11:40 (Mid-Ebb)
Monitoring Location	Mid-Ebb
	I5 : A (N22°11.241 E113° 59.154) I6 : B (N22°11.318 E113° 59.264) I7 : C (N22°11.252 E113° 59.287) I9 : D (N22°11.213 E113° 59.292) I10 : E (N22°11.16 E113° 59.235)
	
	<p style="text-align: center;">Tide Direction</p>  <p style="text-align: center;">Note: Drawing is not to scale</p>

Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 4.1 mg/L (120% of average of UC1 & UC2)		≥ 4.4 mg/L (130% of average of UC1 & UC2)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	5.0 mg/L (I5) 9.0 mg/L (I6) 6.3 mg/L (I7) 7.5 mg/L (I9) 5.7 mg/L (I10)	2.8 mg/L (UC1) 4.0 mg/L (UC2)	3.8 mg/L (I1) 3.5 mg/L (I2) 3.7 mg/L (I3) 2.3 mg/L (I4) 3.8 mg/L (I8)
Possible reason for Action or Limit Level Non-compliance	<p>Works schedule on site on 02/03 include laying of geotextile at caisson seawall area, laying of sand blanket at caisson seawall area, post cone penetration test works, DCM sample coring for DCM main works, DCM main works and removal of surface rock at vertical blockwork seawall area.</p> <p>Dominating sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>From MMO monitoring records on 02/03, MMO teams were arranged to two DCM barges (ESC-61 & ESC-62) and four derrick barges (Shun Tat D12, DL-5, GD-851 & FTB-19) on that day while no deficiency of silt curtain was found before the start of construction activity.</p> <p>I5, I6, I7, I9 & I10 are located close to the work location within the Project site while silt curtain checking was implemented on FTB19 (07:00), ESC-62 (07:30) and ESC-61 (08:30) by the Contractor and checking results showed that no deficiency of silt curtain was found on that day. No sand blanket laying works scheduled on Shun Tat D12, Cheung Kee No.7 & Kam Ying No.8 were carried out with referring to site diary on that day. No surface rock removal works scheduled on DL-5 and GD-851 were carried out with referring to site diary on that day. It might suggest that the SS exceedance at I5, I6, I7, I9 & I10 are deemed to be unrelated to the Project.</p> <p>Site tidiness in the present barges in the Project site was checked during weekly site inspection on 04/03, where no major observation of improper site practice that might contribute to the increase in SS level was observed during the inspection.</p>		
Actions taken / to be taken	Examination of environmental performance of the Project will be continued during the weekly inspection, and the Contractor is remained to implement all applicable mitigation measures as per the Updated EM&A Manual.		
Remarks	Current direction during mid-ebb sampling on 02/03:		



Legend	
Speed (knot)	Speed (knot)
0-0.5	1.5-2.0
0.5-1.0	2.0-2.5
1.0-1.5	2.5 and above

(Sourced from <http://current.hydro.gov.hk/en/map.html>)

Prepared by	Polar Chan
Date	7 March 2019

Incident Report on Action Level or Limit Level Non-compliance

Project	Integrated Waste Management Facilities, Phase 1
Date	4 March 2019 (Lab result received on 7 March 2019)
Time	10:03 – 13:33 (Mid-Ebb) 15:07 – 18:37 (Mid-Flood)

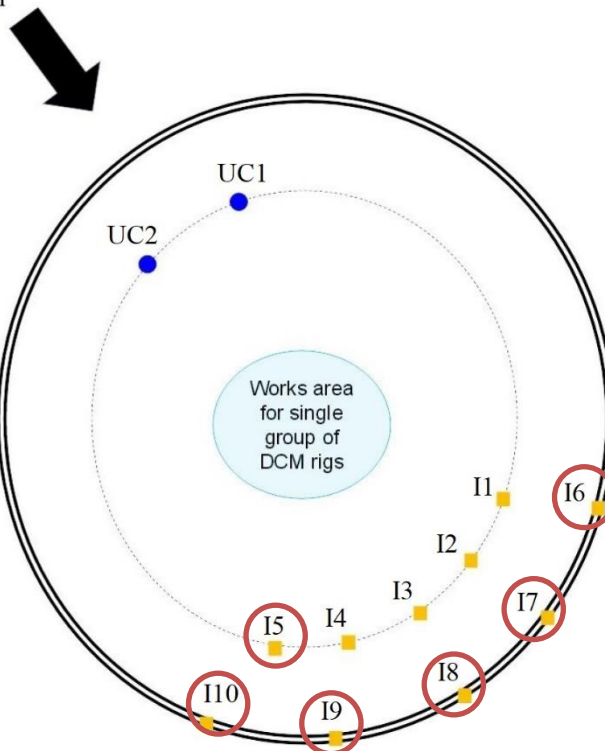
Mid-Ebb

Monitoring Location

- I5 : A (N22°11.197 E113° 59.101)
- I6 : B (N22°11.324 E113° 59.288)
- I7 : C (N22°11.225 E113° 59.334)
- I8 : D (N22°11.191 E113° 59.332)
- I9 : E (N22°11.180 E113° 59.266)
- I10 : F (N22°11.178 E113° 59.184)

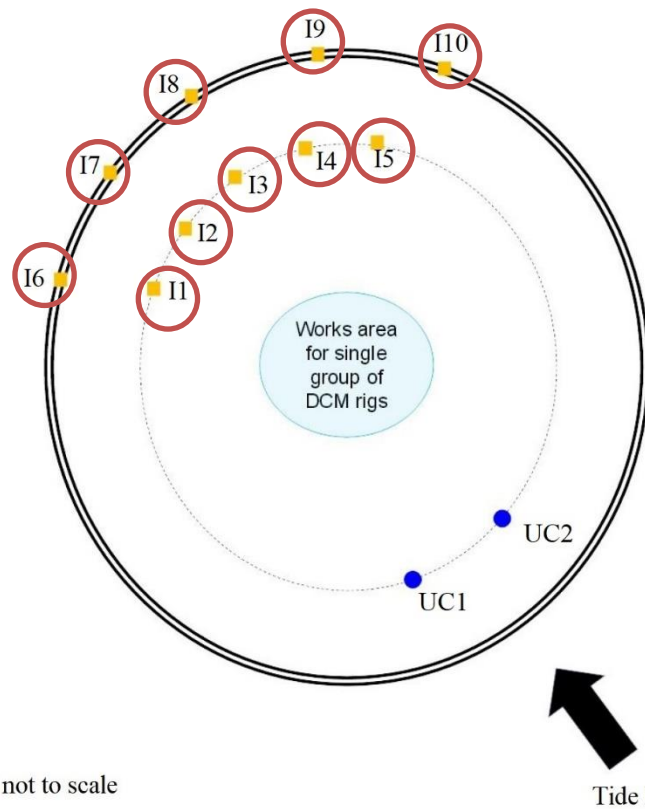
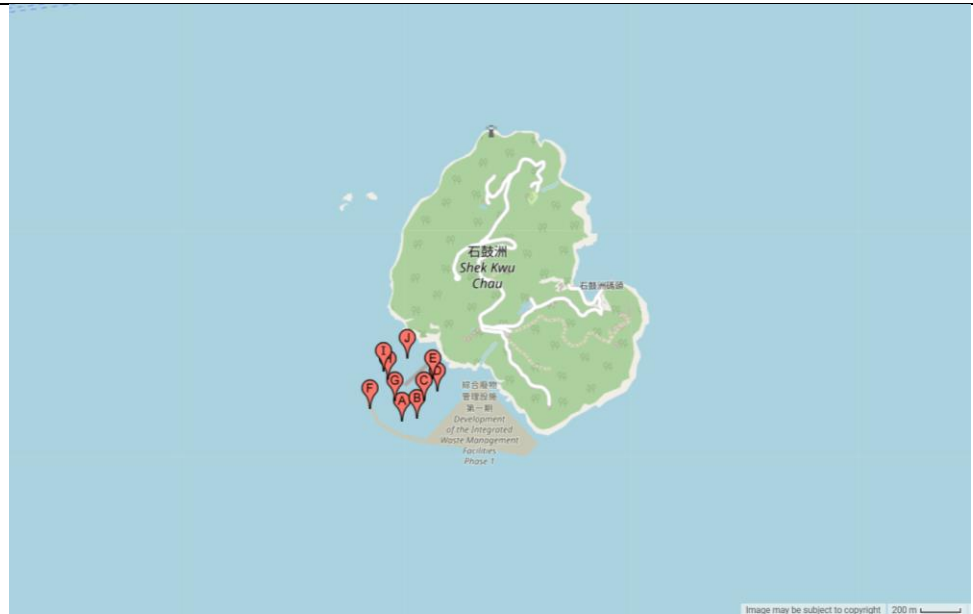


Tide Direction



Note: Drawing is not to scale

Parameter	Suspended Solid (SS)
Action & Limit Levels	Action Level
	Limit Level
	<p>≥ 6.1 mg/L (120% of average of UC1 & UC2)</p> <p>≥ 6.6 mg/L (130% of average of UC1 & UC2)</p>
Measurement Level	Impact Station(s) of Exceedance
	Control Stations
	<p>Impact Station(s) without Exceedance</p> <p>10.8 mg/L (I5) 7.3 mg/L (I6) 7.5 mg/L (I7) 10.0 mg/L (I8) 13.7 mg/L (I9) 9.5 mg/L (I10)</p> <p>5.5 mg/L (UC1) 4.7 mg/L (UC2)</p> <p>4.5 mg/L (I1) 5.8 mg/L (I2) 4.7 mg/L (I3) 3.8 mg/L (I4)</p>
Possible reason for Action or Limit Level Non-compliance	<p>Works schedule on site on 04/03 include laying of geotextile at caisson seawall area, laying of sand blanket at caisson seawall area, post cone penetration test works, DCM sample coring for DCM main works, DCM main works, laying of rocks material at static loading test area and levelling the formation of rubble mound of static loading test.</p> <p>Dominating sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>From MMO monitoring records on 04/03, MMO teams were arranged to two DCM barges (ESC-61 & ESC-62) and four derrick barges (Shun Tat D12, FTB-19, DL-5 & GD-851) on that day while no deficiency of silt curtain was found before the start of construction activity.</p> <p>I5, I6, I7, I8, I9 & I10 are located close to the work location within the Project site while silt curtain checking was implemented on DL-5 (10:30), GD-851 (13:15), FTB19 (09:00), ESC-62 (07:30) and ESC-61 (09:00) by the Contractor and checking results showed that no deficiency of silt curtain was found on that day. No sand blanket laying works scheduled on Shun Tat D12, Cheung Kee No.7 & Kam Ying No.8 were carried out with referring to site diary on that day. It might suggest that the SS exceedance at I5, I6, I7, I8, I9 & I10 are deemed to be unrelated to the Project.</p> <p>Site tidiness in the present barges in the Project site were checked during weekly site inspection on 04/03, where no major observation of improper site practice that might contribute to the increase in SS level was observed during the inspection.</p>
Actions taken / to be taken	Examination of environmental performance of the Project will be continued during the weekly inspection, and the Contractor is remained to implement all applicable mitigation measures as per the Updated EM&A Manual.
Mid-Flood	
Monitoring Location	<p>I1 : A (N22°11.340 E113° 58.979)</p> <p>I2 : B (N22°11.348 E113° 59.024)</p> <p>I3 : C (N22°11.394 E113° 59.043)</p> <p>I4 : D (N22°11.420 E113° 59.082)</p> <p>I5 : E (N22°11.454 E113° 59.068)</p> <p>I6 : F (N22°11.373 E113° 58.886)</p> <p>I7 : G (N22°11.394 E113° 58.958)</p> <p>I8 : H (N22°11.452 E113° 58.938)</p> <p>I9 : I (N22°11.472 E113° 58.926)</p> <p>I10 : J (N22°11.508 E113° 58.995)</p>



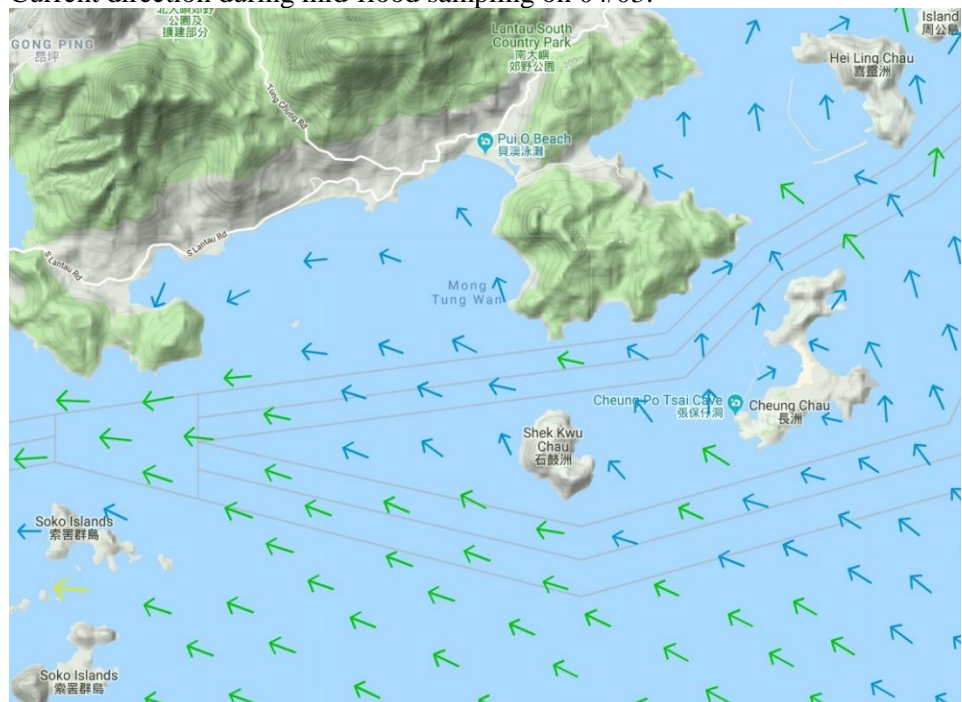
Note: Drawing is not to scale

Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 4.0 mg/L (120% of average of UC1 & UC2)		≥ 4.3 mg/L (130% of average of UC1 & UC2)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	7.0 mg/L (I1) 6.0 mg/L (I2) 6.5 mg/L (I3) 5.2 mg/L (I4) 5.3 mg/L (I5)	2.7 mg/L (UC1) 4.0 mg/L (UC2)	

	<p>4.3 mg/L (I6) 4.3 mg/L (I7) 6.8 mg/L (I8) 5.0 mg/L (I9) 6.5 mg/L (I10)</p>		
Possible reason for Action or Limit Level Non-compliance	<p>Works schedule on site on 04/03 include laying of geotextile at caisson seawall area, laying of sand blanket at caisson seawall area, post cone penetration test works, DCM sample coring for DCM main works, DCM main works, laying of rocks material at static loading test area and levelling the formation of rubble mound of static loading test.</p> <p>Dominating sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>From MMO monitoring records on 04/03, MMO teams were arranged to two DCM barges (ESC-61 & ESC-62) and four derrick barges (Shun Tat D12, FTB-19, DL-5 & GD-851) on that day while no deficiency of silt curtain was found before the start of construction activity.</p> <p>I1, I2, I3, I4, I5, I6, I7, I8, I9 & I10 are located close to the work location within the Project site while silt curtain checking was implemented on DL-5 (10:30), GD-851 (13:15), FTB19 (09:00), ESC-62 (07:30) and ESC-61 (09:00) by the Contractor and checking results showed that no deficiency of silt curtain was found on that day. No sand blanket laying works scheduled on Shun Tat D12, Cheung Kee No.7 & Kam Ying No.8 were carried out with referring to site diary on that day. When compared to the baseline data of dry season (Action Level: 8.0mg/L & Limit Level: 10.0mg/L), most of the monitoring stations (including upstream control station UC1 and UC2) were relatively low, it might suggest that the SS exceedance at I1, I2, I3, I4, I5, I6, I7, I8, I9 & I10 are deemed to be unrelated to the Project.</p> <p>Site tidiness in the present barges in the Project site were checked during weekly site inspection on 04/03, where no major observation of improper site practice that might contribute to the increase in SS level was observed during the inspection.</p>		
Actions taken / to be taken	<p>Examination of environmental performance of the Project will be continued during the weekly inspection, and the Contractor is remained to implement all applicable mitigation measures as per the Updated EM&A Manual.</p>		
Remarks	<p>Current direction during mid-ebb sampling on 04/03:</p>		



Current direction during mid-flood sampling on 04/03:



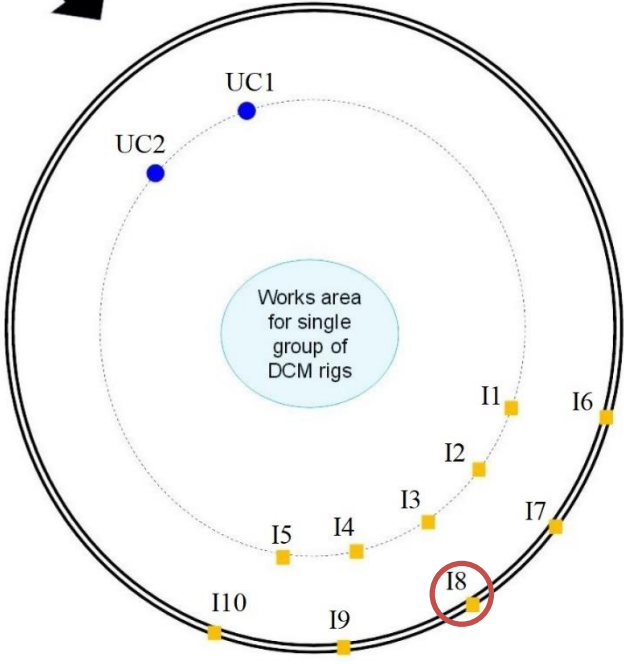


Legend	
Speed (knot)	Speed (knot)
0-0.5	1.5-2.0
0.5-1.0	2.0-2.5
1.0-1.5	2.5 and above

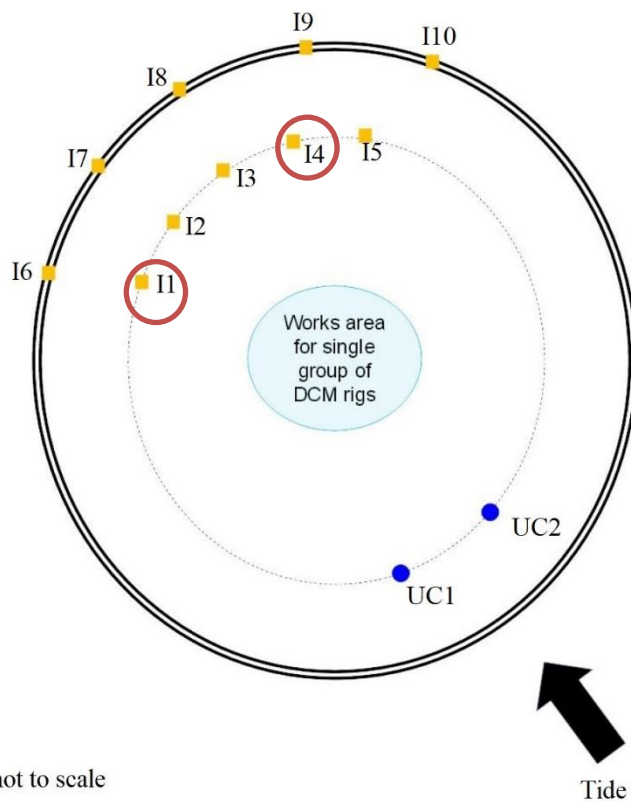
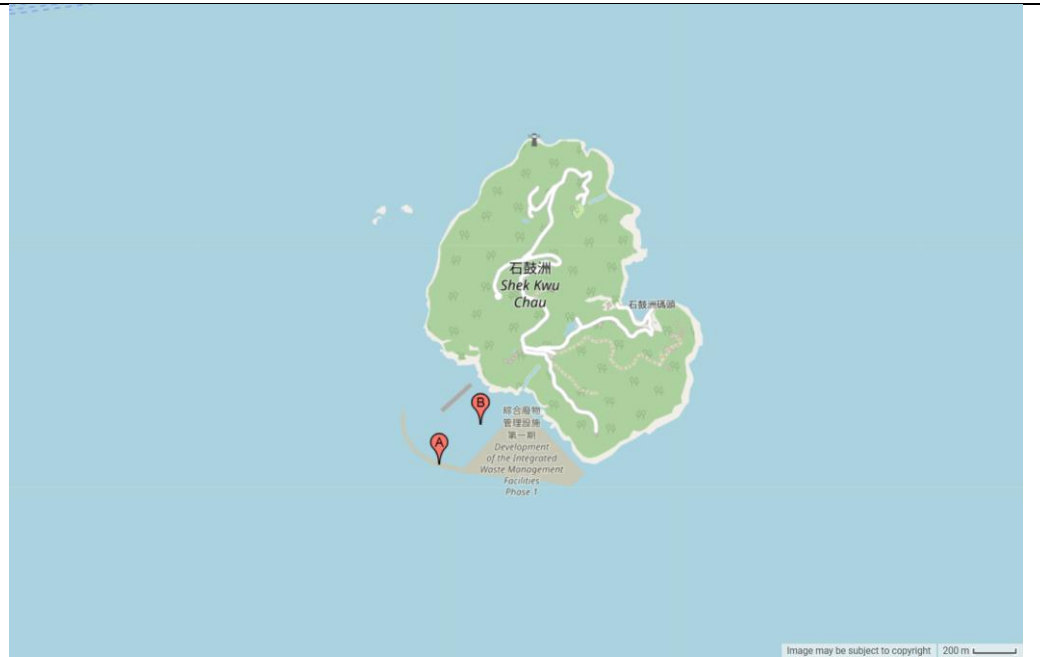
(Sourced from <http://current.hydro.gov.hk/en/map.html>)

Prepared by	Polar Chan
Date	8 March 2019

Incident Report on Action Level or Limit Level Non-compliance

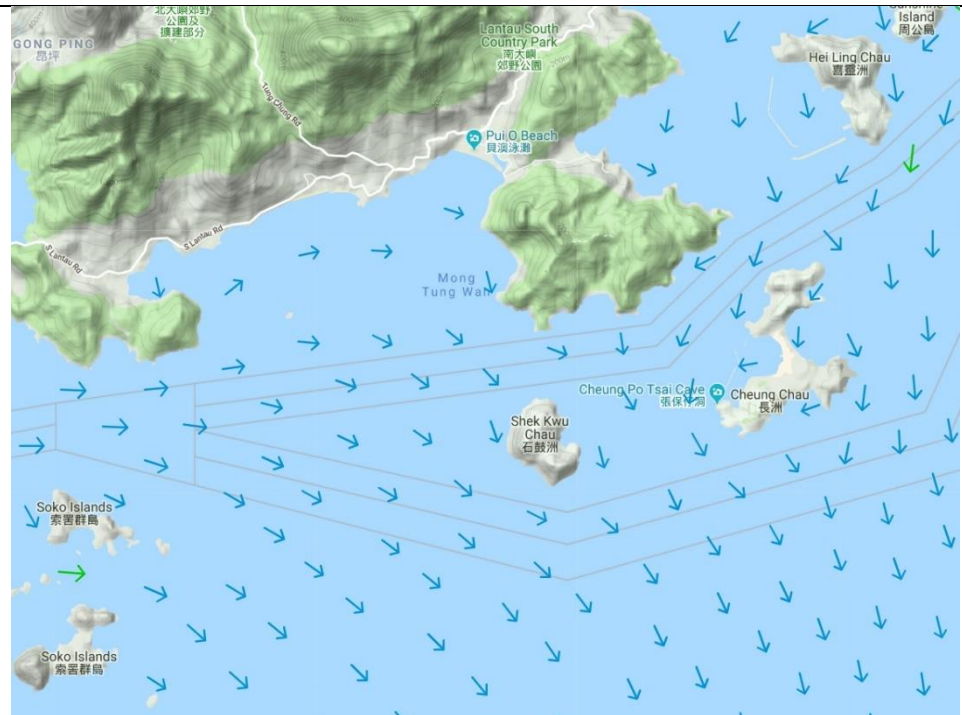
Project	Integrated Waste Management Facilities, Phase 1	
Date	6 March 2019 (Lab result received on 11 March 2019)	
Time	11:02 – 14:32 (Mid-Ebb) 16:37 – 19:00 (Mid-Flood)	
Mid-Ebb		
Monitoring Location	<p>I8 : A (N22°11.232 E113°59.137)</p>  <p style="text-align: right; font-size: small;">Image may be subject to copyright 200 m</p> <p style="text-align: center;">Tide Direction </p>  <p style="text-align: center;">Note: Drawing is not to scale</p>	
Parameter	Suspended Solid (SS)	
Action & Limit Levels	Action Level	Limit Level

	≥ 6.1 mg/L (120% of average of UC1 & UC2)	≥ 6.6 mg/L (130% of average of UC1 & UC2)	
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	7.0 mg/L (I8)	5.3 mg/L (UC1) 4.8 mg/L (UC2)	3.7 mg/L (I1) 5.7 mg/L (I2) 2.2 mg/L (I3) 3.7 mg/L (I4) 4.8 mg/L (I5) 4.0 mg/L (I6) 4.3 mg/L (I7) 5.7 mg/L (I9) 5.0 mg/L (I10)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 06/03 include laying of geotextile at caisson breakwater area, laying of sand blanket at both caisson breakwater area and caisson seawall area, post cone penetration test works, DCM sample coring for DCM main works, DCM main works, levelling of rock fill at static loading test area and removal of surface rock at vertical blockwork seawall area.</p> <p>Dominating sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>From MMO monitoring records on 06/03, MMO teams were arranged to two DCM barges (ESC-61 & ESC-62) and four derrick barges (Shun Tat D12, GD-851, DL-5 & FTB-19) on that day while no deficiency of silt curtain was found before the start of construction activity.</p> <p>I8 is located close to the work location within the Project site while silt curtain checking was implemented on DL-5 (08:30), FTB19 (07:00), ESC-62 (07:30), ESC-61 (08:00) and Shun Tat D12 (09:00) by the Contractor and checking results showed that no deficiency of silt curtain was found on that day. No sand blanket laying works scheduled on Cheung Kee No.7 & Kam Ying No.8 were carried out with referring to the site diary on that day. No surface rock removal works scheduled on GD-851 was carried out with referring to the site diary on that day. It might suggest that the SS exceedance at I8 is deemed to be unrelated to the Project.</p> <p>Site tidiness in the present barges in the Project site was checked during weekly site inspection on 04/03, where no major observation of improper site practice that might contribute to the increase in SS level was observed during the inspection.</p>		
Actions taken / to be taken	Examination of environmental performance of the Project will be continued during the weekly inspection, and the Contractor is remained to implement all applicable mitigation measures as per the Updated EM&A Manual.		
Mid-Flood			
Monitoring Location	I1 : A (N22°11.302 E113° 58.979) I4 : B (N22°11.402 E113° 59.093)		

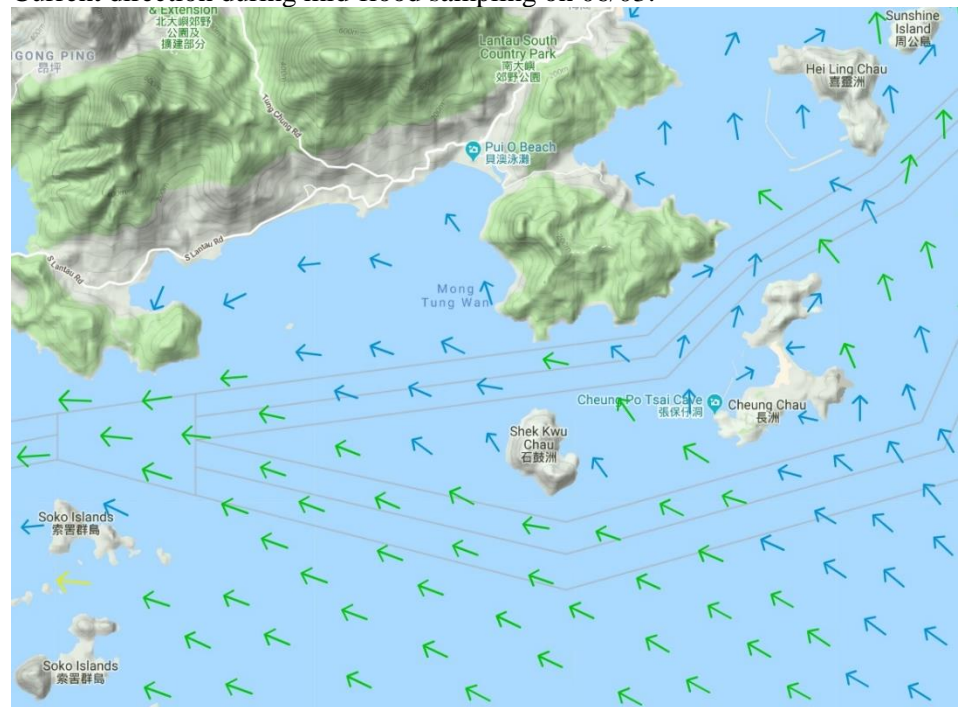


Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 5.1 mg/L (120% of average of UC1 & UC2)		≥ 5.5 mg/L (130% of average of UC1 & UC2)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	5.2 mg/L (I1) 5.2 mg/L (I4)	4.5 mg/L (UC1) 4.0 mg/L (UC2)	4.2 mg/L (I2) 4.0 mg/L (I3) 4.3 mg/L (I5) 4.3 mg/L (I6)

			4.2 mg/L (I7) 5.0 mg/L (I8) 4.3 mg/L (I9) 3.0 mg/L (I10)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 06/03 include laying of geotextile at caisson breakwater area, laying of sand blanket at both caisson breakwater area and caisson seawall area, post cone penetration test works, DCM sample coring for DCM main works, DCM main works, levelling of rock fill at static loading test area and removal of surface rock at vertical blockwork seawall area.</p> <p>Dominating sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>From MMO monitoring records on 06/03, MMO teams were arranged to two DCM barges (ESC-61 & ESC-62) and four derrick barges (Shun Tat D12, GD-851, DL-5 & FTB-19) on that day while no deficiency of silt curtain was found before the start of construction activity.</p> <p>I1 & I4 are located close to the work location within the Project site while silt curtain checking was implemented on DL-5 (08:30), FTB19 (07:00), ESC-62 (07:30), ESC-61 (08:00) and Shun Tat D12 (09:00) by the Contractor and checking results showed that no deficiency of silt curtain was found on that day. No sand blanket laying works scheduled on Cheung Kee No.7 & Kam Ying No.8 were carried out with referring to the site diary on that day. No surface rock removal works scheduled on GD-851 was carried out with referring to the site diary on that day. When compared to the baseline data of dry season (Action Level: 8mg/L & Limit Level: 10mg/L), most of the monitoring stations (including upstream control station UC1 and UC2) were relatively low, it might suggest that the SS exceedance at I1 & I4 are deemed to be unrelated to the Project.</p> <p>Site tidiness in the present barges in the Project site was checked during weekly site inspection on 04/03, where no major observation of improper site practice that might contribute to the increase in SS level was observed during the inspection.</p>		
Actions taken / to be taken	<p>Examination of environmental performance of the Project will be continued during the weekly inspection, and the Contractor is remained to implement all applicable mitigation measures as per the Updated EM&A Manual.</p>		
Remarks	<p>Current direction during mid-ebb sampling on 06/03:</p>		



Current direction during mid-flood sampling on 06/03:


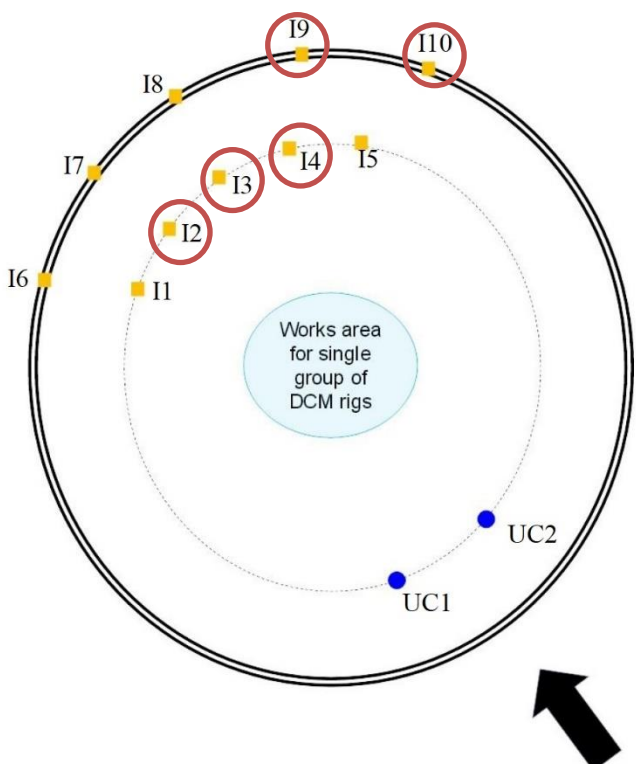



Legend	
Speed (knot)	Speed (knot)
0-0.5	1.5-2.0
0.5-1.0	2.0-2.5
1.0-1.5	2.5 and above

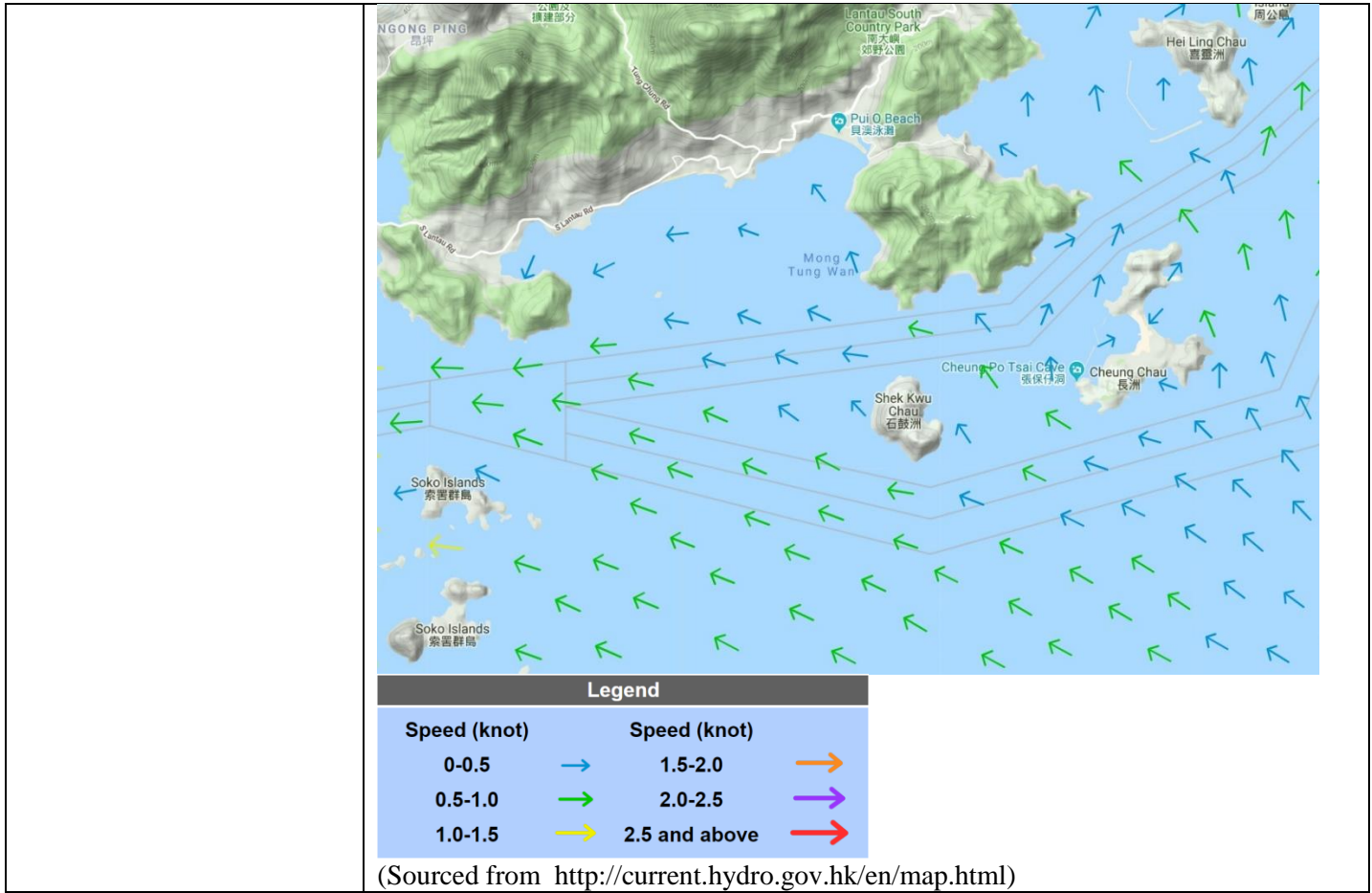
(Sourced from <http://current.hydro.gov.hk/en/map.html>)

Prepared by	Polar Chan
Date	12 March 2019

Incident Report on Action Level or Limit Level Non-compliance

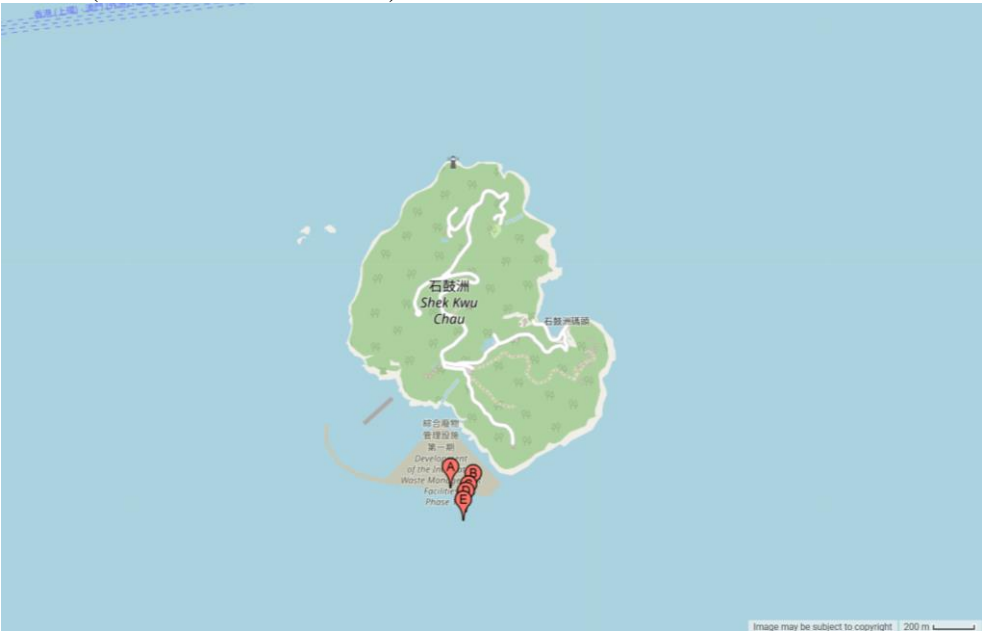
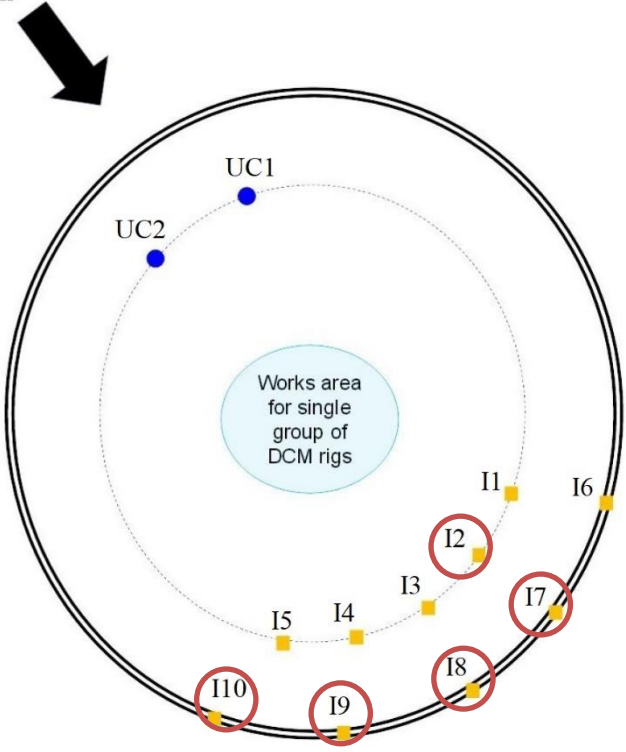
Project	Integrated Waste Management Facilities, Phase 1
Date	8 March 2019 (Lab result received on 13 March 2019)
Time	16:37 – 19:00 (Mid-Flood)
Monitoring Location	Mid-Flood
	<p>I2 : A (N22°11.335 E113° 59.023) I3 : B (N22°11.379 E113° 59.020) I4 : C (N22°11.446 E113° 59.054) I9 : D (N22°11.446 E113° 59.018) I10 : E (N22°11.482 E113° 59.004)</p>   <p style="text-align: center;">Note: Drawing is not to scale</p> <p style="text-align: right;">Tide Direction </p>
Parameter	Suspended Solid (SS)

Action & Limit Levels	Action Level		Limit Level
	≥ 5.6 mg/L (120% of average of UC1 & UC2)		≥ 6.1 mg/L (130% of average of UC1 & UC2)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	7.5 mg/L (I2) 6.5 mg/L (I3) 6.5 mg/L (I4) 5.8 mg/L (I9) 5.7 mg/L (I10)	5.2 mg/L (UC1) 4.2 mg/L (UC2)	3.8 mg/L (I1) 4.3 mg/L (I5) 5.0 mg/L (I6) 4.5 mg/L (I7) 4.7 mg/L (I8)
Possible reason for Action or Limit Level Non-compliance	<p>Works schedule on site on 08/03 include laying of geotextile at caisson seawall area, laying of sand blanket at caisson seawall area, DCM sample coring for DCM main works, DCM main works and removal of surface rock at vertical blockwork seawall area.</p> <p>Dominating sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>From MMO monitoring records on 08/03, MMO teams were arranged to one DCM barge (ESC-61) and three derrick barges (DL-5, Shun Tat D12 & FTB-19) on that day while no deficiency of silt curtain was found before the start of construction activity.</p> <p>I2, I3, I4, I9 & I10 are located close to the work location within the Project site while silt curtain checking was implemented on DL-5 (08:30) by the Contractor and checking results showed that no deficiency of silt curtain was found on that day. No sand blanket laying scheduled on Shun Tat D12, FTB-19, Cheung Kee No.7 & Kam Ying No.8 were carried out due to wavy condition with referring to the site diary on that day. No DCM main works scheduled on ESC-61 was carried out due to wavy condition with referring to the site diary on that day. No surface rock removal works scheduled on GD-851 was carried out due to wavy condition with referring to the site diary on that day. When compared to the baseline data of dry season (Action Level: 8.0 mg/L & Limit Level: 10.0 mg/L), most of the monitoring stations (including upstream control station UC1 and UC2) were relatively low, it might suggest that the SS exceedance at I2, I3, I4, I9 & I10 are deemed to be unrelated to the Project.</p> <p>Site tidiness in the present barges in the Project site were checked during weekly site inspection on 04/03, where no major observation of improper site practice that might contribute to the increase in SS level was observed during the inspection.</p>		
Actions taken / to be taken	Examination of environmental performance of the Project will be continued during the weekly inspection, and the Contractor is remained to implement all applicable mitigation measures as per the Updated EM&A Manual.		
Remarks	Current direction during mid-flood sampling on 08/03:		

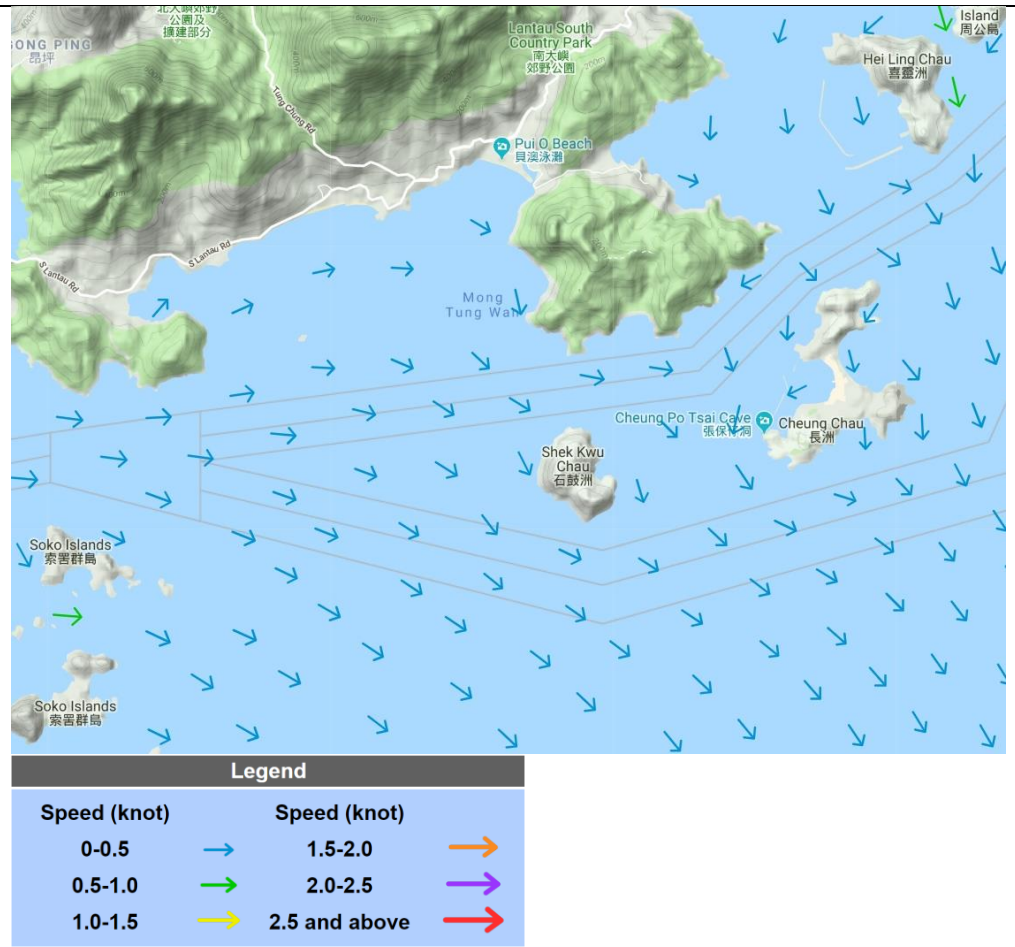


Prepared by	Polar Chan
Date	14 March 2019

Incident Report on Action Level or Limit Level Non-compliance

Project	Integrated Waste Management Facilities, Phase 1
Date	10 March 2019 (Lab result received on 13 March 2019)
Time	12:51 – 16:21 (Mid-Ebb)
Monitoring Location	<p style="text-align: center;">Mid-Ebb</p> <p>I2 : A (N22°11.241 E113° 59.154) I7 : B (N22°11.318 E113° 59.264) I8 : C (N22°11.252 E113° 59.287) I9 : D (N22°11.213 E113° 59.292) I10 : E (N22°11.16 E113° 59.235)</p>  <p style="text-align: center;">Tide Direction</p>  <p>Note: Drawing is not to scale</p>

Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 5.1 mg/L (120% of average of UC1 & UC2)		≥ 5.5 mg/L (130% of average of UC1 & UC2)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	5.3 mg/L (I2) 5.8 mg/L (I7) 6.8 mg/L (I8) 7.8 mg/L (I9) 5.2 mg/L (I10)	3.8 mg/L (UC1) 4.7 mg/L (UC2)	4.0 mg/L (I1) 4.7 mg/L (I3) 3.8 mg/L (I4) 4.2 mg/L (I5) 4.0 mg/L (I6)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 10/03 include laying of geotextile at caisson breakwater area, laying of sand blanket at both caisson breakwater area and caisson seawall area, post cone penetration test works, DCM sample coring for DCM main works, DCM main works and removal of surface rock at vertical blockwork seawall area.</p> <p>Dominating sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>From MMO monitoring records on 10/03, MMO teams were arranged to one DCM barge (ESC-61) and four derrick barges (Shun Tat D12, GD-851, DL-5 & FTB-19) on that day while no deficiency of silt curtain was found before the start of construction activity.</p> <p>I2, I7, I8, I9 & I10 are located close to the work location within the Project site while silt curtain checking was implemented on DL-5 (08:30), FTB19 (07:45), ESC-61 (08:00) and Shun Tat D12 (08:50) by the Contractor and checking results showed that no deficiency of silt curtain was found on that day. No sand blanket laying works scheduled on Cheung Kee No.7 & Kam Ying No.8 were carried out with referring to the site diary on that day. No surface rock removal works scheduled on GD-851 was carried out with referring to the site diary on that day. When compared to the baseline data of dry season (Action Level: 8.0 mg/L & Limit Level: 10.0mg/L), most of the monitoring stations (including upstream control station UC1 and UC2) were relatively low, it might suggest that the SS exceedance at I2, I7, I8, I9 & I10 are deemed to be unrelated to the Project.</p> <p>Site tidiness in the present barges in the Project site were checked during weekly site inspection on 12/03, where part of silt curtain at the back location of the barge was broken and floated on surface on ESC-61. However, according to the comparison with baseline data as detailed in the previous paragraph, this observation was not considered as the source of SS exceedance.</p>		
Actions taken / to be taken	<p>Part of the silt curtain at the back location of the barge was maintained on 12/03. The Contractor was reminded to keep tracking on the status of the deployed silt curtain during construction works.</p> <p>Examination of environmental performance of the Project will be continued during the weekly inspection, and the Contractor is reminded to implement all applicable mitigation measures as per the Updated EM&A Manual.</p>		
Remarks	Current direction during mid-ebb sampling on 10/03:		

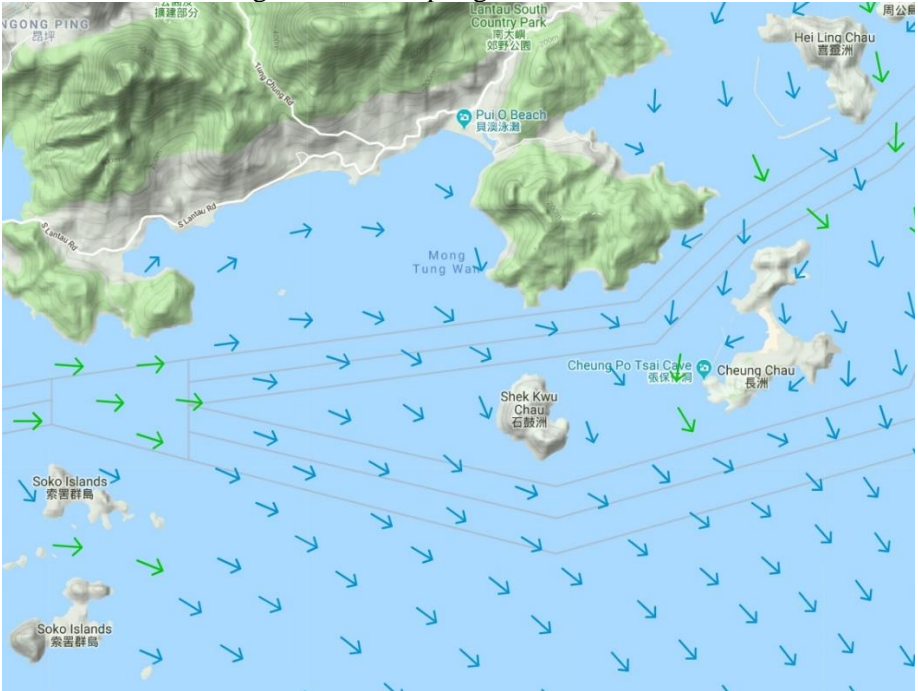


(Sourced from <http://current.hydro.gov.hk/en/map.html>)

Prepared by	Polar Chan
Date	14 March 2019

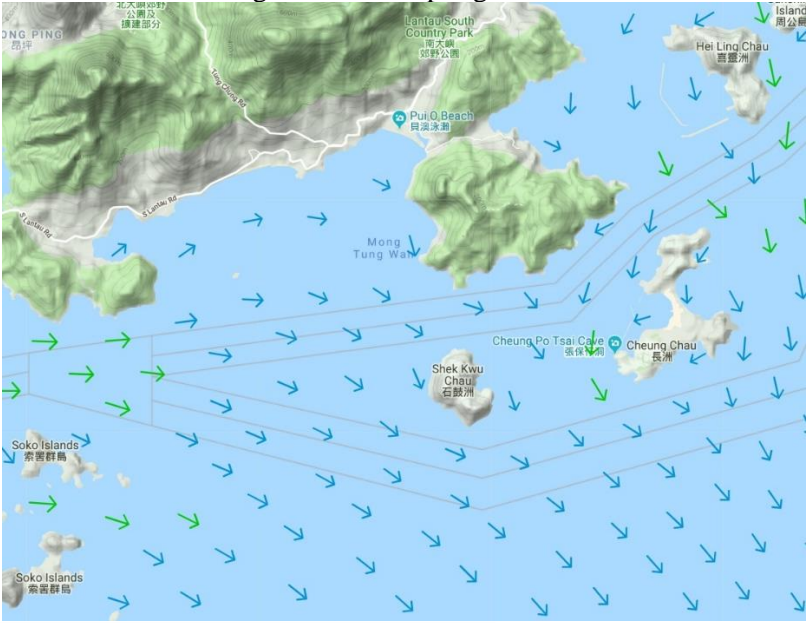
Incident Report on Action Level or Limit Level Non-compliance

Project	Integrated Waste Management Facilities, Phase 1		
Date	13 March 2019 (Lab result received on 18 March 2019)		
Time	14:52 – 18:22 (Mid-Ebb)		
Monitoring Location	Mid-Ebb		
	<p>The map shows the Shek Kwu Chau area with various monitoring stations marked with green dots: M1, S1, B1, B2, B3, B4, C1, C2, H1, CR1, CR2, and CR3. A red square indicates the proposed outfall. Four lines represent the proposed 132KV submarine cables. A purple shaded area shows the IWMF site boundary, and a green dashed line shows the land formation footprint. A north arrow is in the top right corner.</p>		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 8.0 mg/L		≥ 10.0 mg/L
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	8.8 mg/L (M1) 8.0 mg/L (S1)	5.7 mg/L (C1) 6.3 mg/L (C2)	7.0 mg/L (B1) 6.8 mg/L (B2) 4.3 mg/L (B3) 5.3 mg/L (B4) 5.8 mg/L (F1) 5.2 mg/L (H1) 4.3 mg/L (CR1) 6.2 mg/L (CR2) 5.2 mg/L (S2) 5.2 mg/L (S3)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 13/03 include laying of geotextile at caisson breakwater area, laying of sand blanket at both caisson breakwater area and caisson seawall area, post cone penetration test works, DCM sample coring for DCM main works, DCM main works, removal of surface rock at vertical blockwork seawall area and levelling rockfill at static loading test area.</p> <p>Dominating sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>M1 and S1 are located at unrelated stream direction (neither upstream nor downstream, far away) to the works location, exceedance of these monitoring stations are deemed to be unrelated to the Project.</p>		

	<p>From MMO monitoring records on 13/03, MMO teams were arranged to one DCM barge (ESC-61) and five derrick barges (Shun Tat D12, FTB-19, DL-5, Cheung Kee No.7 & GD851) on that day while no deficiency of silt curtain was found before the start of construction activity.</p> <p>Silt curtain checking was implemented on DL-5 (08:30), GD-851 (08:30), ESC-61 (07:30), Cheung Kee No.7 (08:00), FTB-19 (18:00) & Shun Tat D12 (09:00) by the Contractor and checking results showed that no deficiency of silt curtain was found on that day. No surface rock removal works scheduled on Kam Ying No.8 was carried out with referring to the site diary on that day. It might suggest that the SS exceedance at M1 and S1 are deemed to be unrelated to the Project.</p> <p>Site tidiness in the present barges in the Project site was checked during weekly site inspection on 12/03, where part of silt curtain at the back location of the barge was broken and floated on surface on ESC-61. However, according to the investigation in the previous paragraphs, this observation was not considered as the source of SS exceedance.</p>
<p>Actions taken / to be taken</p>	<p>Part of the silt curtain at the back location of the barge was maintained on 12/03. The Contractor was reminded to keep tracking on the status of the deployed silt curtain during construction works.</p> <p>Examination of environmental performance of the Project will be continued during the weekly inspection, and the Contractor is remained to implement all applicable mitigation measures as per the Updated EM&A Manual.</p>
<p>Remarks</p>	<p>Current direction during mid-ebb sampling on 13/03:</p>  <p>(Sourced from http://current.hydro.gov.hk/en/map.html)</p>
<p>Prepared by</p>	<p>Polar Chan</p>
<p>Date</p>	<p>19 March 2019</p>

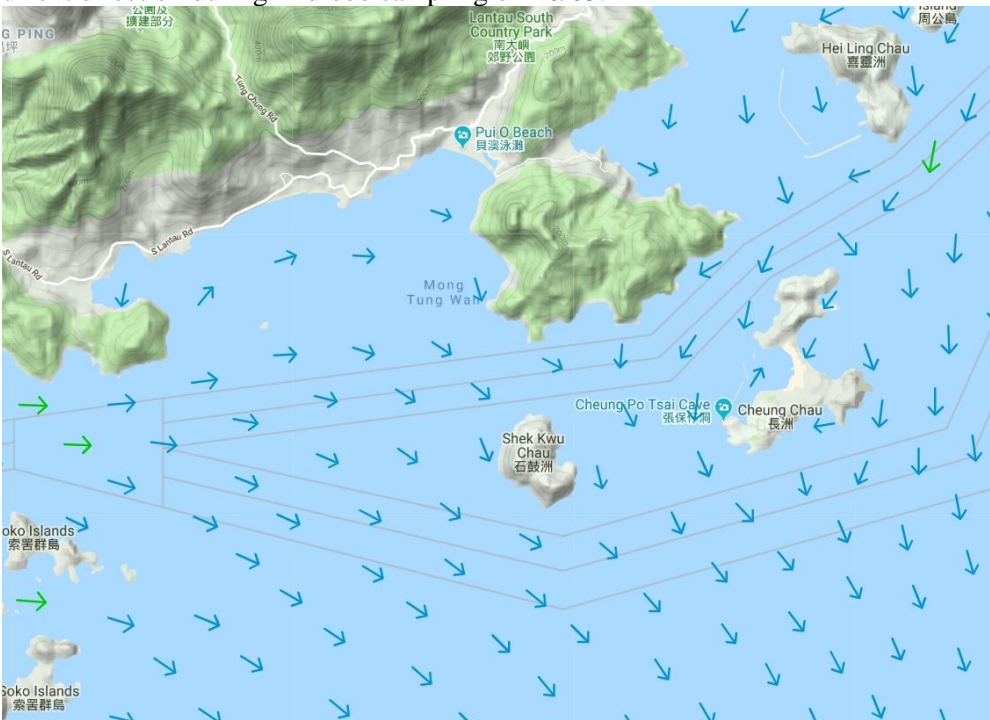
Incident Report on Action Level or Limit Level Non-compliance

Project	Integrated Waste Management Facilities, Phase 1		
Date	15 March 2019 (Lab result received on 20 March 2019)		
Time	15:37 – 19:00 (Mid-Ebb)		
Monitoring Location	Mid-Ebb		
	<p>The map shows the Shek Kwu Chau area with various monitoring stations marked with green dots. Stations F1 and M1 are circled in red. A red square indicates the proposed outfall. Four lines represent proposed 132KV submarine cables. A purple shaded area shows the IWMF site boundary, and a green dashed line shows the IWMF site boundary footprint. A north arrow is in the top right corner.</p>		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 8.0 mg/L		≥ 10.0 mg/L
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	8.8 mg/L (F1) 8.7 mg/L (M1)	5.3 mg/L (C1) 7.0 mg/L (C2)	5.3 mg/L (B1) 4.8 mg/L (B2) 5.0 mg/L (B3) 5.5 mg/L (B4) 6.2 mg/L (H1) 5.5 mg/L (CR1) 7.7 mg/L (CR2) 7.3 mg/L (S1) 4.7 mg/L (S2) 7.8 mg/L (S3)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 15/03 include laying of geotextile at caisson breakwater area, laying of sand blanket at caisson seawall area, DCM sample coring for DCM main works, DCM main works, post cone penetration test works and removal of surface rock at vertical blockwork seawall area.</p> <p>Dominating sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>F1 and M1 are located at unrelated stream direction (neither upstream nor downstream, far away) to the works location, exceedance of these monitoring stations are deemed to be unrelated to the project.</p>		

	<p>From MMO monitoring records on 15/03, MMO teams were arranged to one DCM barge (ESC-61) and four derrick barges (Cheung Kee No.7, Cheung Kee No.10, GD-851 & FTB-19) on that day while no deficiency of silt curtain was found before the start of construction activity.</p> <p>Silt curtain checking was implemented on FTB19 (09:00), Cheung Kee No.10 (11:30) and GD-851 (08:30) by the Contractor and checking results showed that no deficiency of silt curtain was found on that day. No sand blanket laying works scheduled on Cheung Kee No.7 was carried out with referring to the site diary on that day. No DCM main works scheduled on ESC-61 was carried out due to adverse wave condition with referring to the site diary on that day. No surface rock removal works scheduled on Kam Ying No.8 & DL-5 were carried out with referring to the site diary on that day. It might suggest that the SS exceedance at F1 and M1 are deemed to be unrelated to the Project.</p> <p>Site tidiness in the present barges in the Project site was checked during weekly site inspection on 12/03, where part of silt curtain at the back location of the barge was broken and floated on surface on ESC-61. However, according to the investigation in the previous paragraphs, this observation was not considered as the source of SS exceedance.</p>
<p>Actions taken / to be taken</p>	<p>Part of the silt curtain at the back location of the barge was maintained on 12/03. The Contractor was reminded to keep tracking on the status of the deployed silt curtain during construction works.</p> <p>Examination of environmental performance of the Project will be continued during the weekly inspection, and the Contractor is remained to implement all applicable mitigation measures as per the Updated EM&A Manual.</p>
<p>Remarks</p>	<p>Current direction during mid-ebb sampling on 15/03:</p>  <p>(Sourced from http://current.hydro.gov.hk/en/map.html)</p>
<p>Prepared by</p>	<p>Polar Chan</p>
<p>Date</p>	<p>21 March 2019</p>

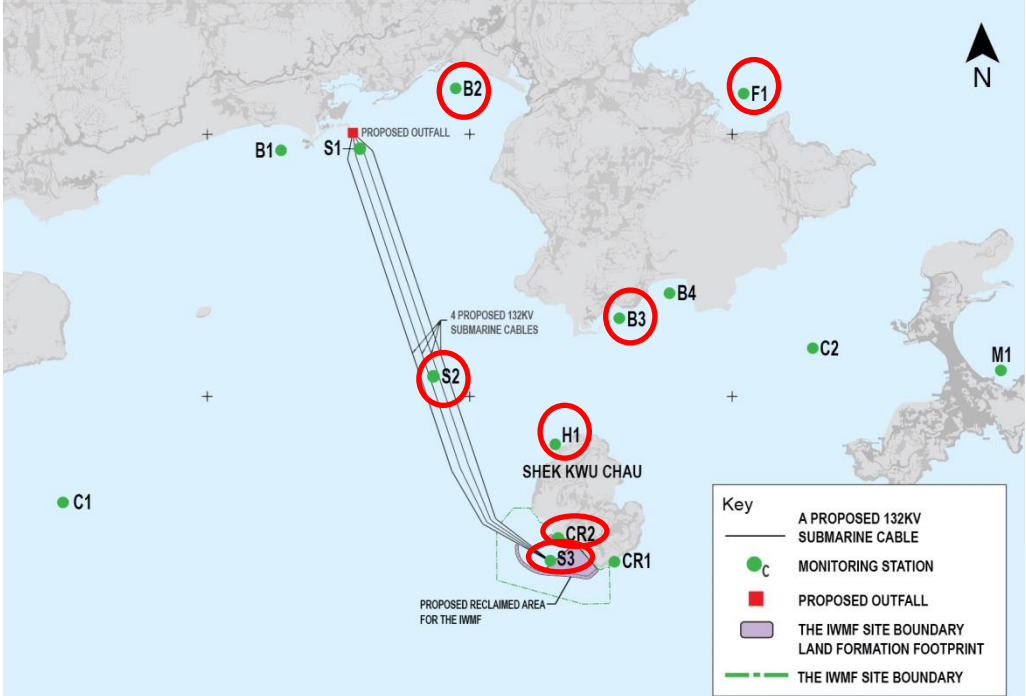
Incident Report on Action Level or Limit Level Non-compliance

Project	Integrated Waste Management Facilities, Phase 1		
Date	20 March 2019 (Lab result received on 22 March 2019)		
Time	14:52 – 19:00 (Mid-Ebb)		
Monitoring Location	Mid-Ebb B1, B2, B3, B4, F1, H1, M1, CR1, CR2, S1 & S3		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 8.4 mg/L (120% of C1)		≥ 10.0 mg/L
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	11.0 mg/L (B1) 9.5 mg/L (B2) 10.3 mg/L (B3) 11.8 mg/L (B4) 9.7 mg/L (F1) 8.7 mg/L (H1) 9.7 mg/L (M1) 8.7 mg/L (CR1) 8.7 mg/L (CR2) 9.5 mg/L (S1) 8.5 mg/L (S3)	7.0 mg/L (C1) 8.7 mg/L (C2)	8.3 mg/L (S2)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 20/03 include laying of geotextile at caisson breakwater area, laying of sand blanket at both caisson breakwater area and caisson seawall area, post cone penetration test works, DCM sample coring for DCM main works, DCM main works and removal of surface rock at vertical blockwork seawall area.</p> <p>Dominating sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>B1, B2, B3, B4, F1, H1, M1 & S1 are located at unrelated stream direction (neither upstream nor downstream, far away) to the works location, exceedance of these monitoring stations are deemed to be unrelated to the Project.</p>		

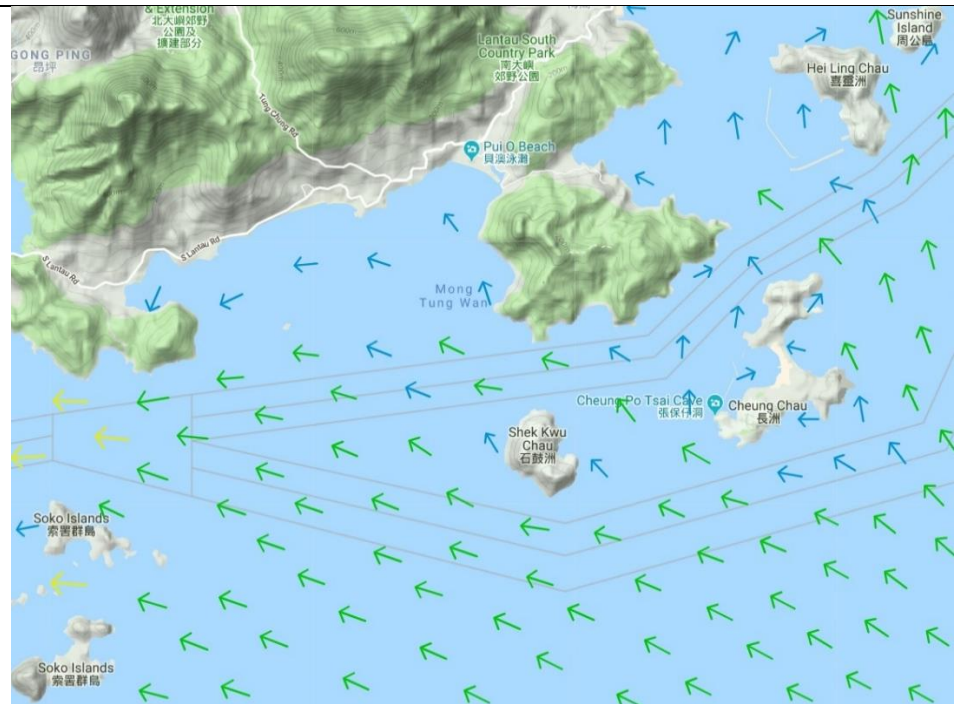
	<p>From MMO monitoring records on 20/03, MMO teams were arranged to two DCM barges (ESC-61 & ESC-62) and five derrick barges (Shun Tat D12, GD-851, FTB-19, DL-5 & Cheung Kee No.10) on that day while no deficiency of silt curtain was found before the start of construction activity.</p> <p>H1 is located at upstream location, CR1 is located at downstream direction, CR2 & S3 are located close to the works location within the Project site, while silt curtain checking was implemented on GD-851 (08:30), ESC-62 (07:00), ESC-61 (07:30), FTB-19 (09:40), Shun Tat D12 (09:00) by the Contractor and checking results showed that no deficiency of silt curtain was found on that day. No sand blanket laying scheduled on Cheung Kee No.7 & Cheung Kee No.10 were carried out with referring to site diary on that day. No surface rock removal works scheduled on DL-5 was carried out with referring to the site diary on that day. It might suggest that the SS exceedance at B1, B2, B3, B4, F1, H1, M1, CR1, CR2, S1 & S3 are deemed to be unrelated to the Project, and indicated the high SS background due to natural fluctuation at the waters near SKC.</p> <p>Site tidiness in the present barges in the Project site was checked during weekly site inspection on 20/03, where was no major observation of improper site practice that might contribute to the increase in SS level observed during the inspection.</p>
<p>Actions taken / to be taken</p>	<p>Examination of environmental performance of the Project will be continued during the weekly inspection, and the Contractor is remained to implement all applicable mitigation measures as per the Updated EM&A Manual.</p>
<p>Remarks</p>	<p>Current direction during mid-ebb sampling on 20/03:</p>  <p>(Sourced from http://current.hydro.gov.hk/en/map.html)</p>
<p>Prepared by</p>	<p>Polar Chan</p>
<p>Date</p>	<p>23 March 2019</p>

Incident Report on Action Level or Limit Level Non-compliance

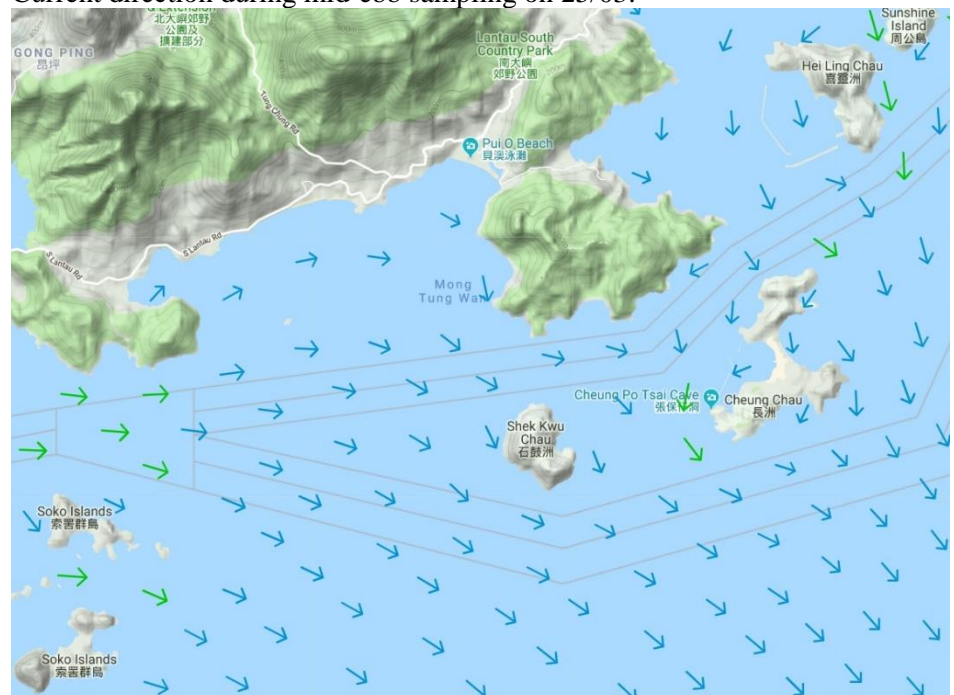
Project	Integrated Waste Management Facilities, Phase 1		
Date	25 March 2019 (Lab result received on 28 March 2019)		
Time	08:00 – 11:40 (Mid-Flood) 13:30 – 17:00 (Mid-Ebb)		
Mid-Flood			
Monitoring Location	M1, CR1, CR2 & S3		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 8.0 mg/L		≥ 10.0 mg/L
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	8.3 mg/L (M1) 8.8 mg/L (CR1) 9.2 mg/L (CR2) 8.3 mg/L (S3)	8.7 mg/L (C1) 5.3 mg/L (C2)	7.0 mg/L (B1) 6.5 mg/L (B2) 6.5 mg/L (B3) 5.0 mg/L (B4) 7.8 mg/L (F1) 5.3 mg/L (H1) 7.8 mg/L (S1) 7.0 mg/L (S2)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 25/03 include laying of geotextile at caisson breakwater area, laying of sand blanket at both caisson breakwater area and caisson seawall area, post cone penetration test works, DCM sample coring for DCM main works, DCM main works, removal of surface rock at vertical blockwork seawall area and dredging at vertical blockwork seawall area.</p> <p>Dominating sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>M1 is located at unrelated stream direction (neither upstream nor downstream, far away) to the works location, exceedance of this monitoring station is deemed to be unrelated to the Project.</p>		

	<p>From MMO monitoring records on 25/03, MMO teams were arranged to two DCM barges (ESC-61 & ESC-62) and five derrick barges (Shun Tat D12, GD-851, FTB-19, DL-5 & Cheung Kee No.10) on that day while no deficiency of silt curtain was found before the start of construction activity.</p> <p>CR1 is located at upstream direction, CR2 & S3 are located close to the works location within the Project site while silt curtain checking was implemented by the Contractor on DL-5 (08:30), FTB-19 (20:45), ESC-62 (16:30), ESC-61 (09:15) & Shun Tat D12 (09:30) and checking results showed that no deficiency of silt curtain was found on that day. No construction works scheduled on Cheung Kee No.10 was carried out with referring to the site diary on that day. No surface rock removal work scheduled on GD-851 was carried out with referring to the site diary on that day. It might suggest that the SS exceedance at CR1, CR2 & S3 are deemed to be unrelated to the Project.</p> <p>Site tidiness in the present barges in the Project site was checked during weekly site inspection on 26/03, where damage was observed on the silt curtain at the stern near the anchor on ESC-61. However, according to the investigation in the previous paragraphs, this observation was not considered as the source of SS exceedance.</p>		
<p>Actions taken / to be taken</p>	<p>The damage of silt curtain at the stern near the anchor ESC-61 was maintained on 01/04. The Contractor was reminded to keep tracking on the status of the deployed silt curtain during construction works.</p> <p>Examination of environmental performance of the Project will be continued during the weekly inspection, and the Contractor is remained to implement all applicable mitigation measures as per the Updated EM&A Manual.</p>		
<p>Mid-Ebb</p>			
<p>Monitoring Location</p>	<p>B2, B3, F1, H1, CR2, S2 & S3</p> 		
<p>Parameter</p>	<p>Suspended Solid (SS)</p>		
<p>Action & Limit Levels</p>	<p>Action Level</p>		<p>Limit Level</p>
	<p>≥ 8.4 mg/L (120% of C1)</p>		<p>≥ 10.0 mg/L</p>
<p>Measurement Level</p>	<p>Impact Station(s) of Exceedance</p>	<p>Control Stations</p>	<p>Impact Station(s) without Exceedance</p>

	8.5 mg/L (B2) 9.8 mg/L (B3) 9.2 mg/L (F1) 9.8 mg/L (H1) 9.8 mg/L (CR2) 8.5 mg/L (S2) 8.5 mg/L (S3)	7.0 mg/L (C1) 8.5 mg/L (C2)	7.8 mg/L (B1) 7.0 mg/L (B4) 7.7 mg/L (M1) 7.5 mg/L (CR1) 8.3 mg/L (S1)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 25/03 include laying of geotextile at caisson breakwater area, laying of sand blanket at both caisson breakwater area and caisson seawall area, post cone penetration test works, DCM sample coring for DCM main works, DCM main works, removal of surface rock at vertical blockwork seawall area and dredging at vertical blockwork seawall area.</p> <p>Dominating sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>B2, B3, F1 & S2 are located at unrelated stream direction (neither upstream nor downstream, far away) to the works location, exceedance of these monitoring stations are deemed to be unrelated to the Project.</p> <p>From MMO monitoring records on 25/03, MMO teams were arranged to two DCM barges (ESC-61 & ESC-62) and five derrick barges (Shun Tat D12, GD-851, FTB-19, DL-5 & Cheung Kee No.10) on that day while no deficiency of silt curtain was found before the start of construction activity.</p> <p>H1 is located upstream location, CR2 & S3 are located close to the works location within the Project site while silt curtain checking was implemented by the Contractor on DL-5 (08:30), FTB-19 (20:45), ESC-62 (16:30), ESC-61 (09:15) & Shun Tat D12 (09:30) and checking results showed that no deficiency of silt curtain was found on that day. No construction works scheduled on Cheung Kee No.10 was carried out with referring to the site diary on that day. No surface rock removal work scheduled on GD-851 was carried out with referring to the site diary on that day. It might suggest that the SS exceedance at H1, CR2 & S3 are deemed to be unrelated to the Project.</p> <p>Site tidiness in the present barges in the Project site was checked during weekly site inspection on 26/03, where damage was observed on the silt curtain at the stern near the anchor on ESC-61. However, according to the investigation in the previous paragraphs, this observation was not considered as the source of SS exceedance.</p>		
Actions taken / to be taken	<p>The damage of silt curtain at the stern near the anchor on ESC-61 was maintained on 01/04. The Contractor was reminded to keep tracking on the status of the deployed silt curtain during construction works.</p> <p>Examination of environmental performance of the Project will be continued during the weekly inspection, and the Contractor is remained to implement all applicable mitigation measures as per the Updated EM&A Manual.</p>		
Remarks	Current direction during mid-flood sampling on 25/03:		



Current direction during mid-ebb sampling on 25/03:



(Sourced from <http://current.hydro.gov.hk/en/map.html>)

Prepared by	Polar Chan
Date	29 March 2019