

## Appendix N Exceedance Report

## Statistical Summary of Exceedances in the Reporting Period

Water Quality (Regular DCM)			
Location	Action Level	Limit Level	Total
B1	4	2	6
B2	4	3	7
B3	6	3	9
B4	2	2	4
CR1	3	1	4
CR2	4	2	6
F1A	4	2	6
H1	3	0	3
S1	2	2	4
S2A	4	3	7
S3	4	0	4
M1	2	2	4

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	02 Dec 2019 (Lab result received on 05 Dec 2019)		
Time	09:45 – 13:15 (Mid-Flood) 15:09 – 17:51 (Mid-Ebb)		
Mid-Flood			
Monitoring Location	<p>M1</p>		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 15.6 mg/L (120% of C2A)		≥ 16.9 mg/L (130% of C2A)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	17.2 mg/L (M1)	13.3 mg/L (C1A) 13.0 mg/L (C2A)	8.0 mg/L (B1) 8.5 mg/L (B2) 6.0 mg/L (B3) 7.5 mg/L (B4) 13.0 mg/L (F1A) 7.3 mg/L (H1) 14.2 mg/L (CR1) 15.3 mg/L (CR2) 13.8 mg/L (S1) 12.8 mg/L (S2A) 12.7 mg/L (S3)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 02/12 include DCM main works, DCM sample coring for DCM main works, cone penetration test, removal of the slag materials, levelling the slag materials, laying sand blanket, levelling of rock fill, levelling the sand blanket, rock filling works and dredging,</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</p>		

unrelated to the Project.

Silt curtain checking was implemented on DL5 (07:00), ESC-61 (07:00), ESC-62 (07:00), GD851 (07:00), GD853 (07:00), UDL-2 (19:00), 宏建 3 (07:00), 永照 18 (07:00) & Cheung Kee No.10 (07:00) and checking results showed that no deficiency of silt curtain was found on that day. According to the site document provided by the Contractor, no works record of 宏建 2 was stated in the site diary on that day.

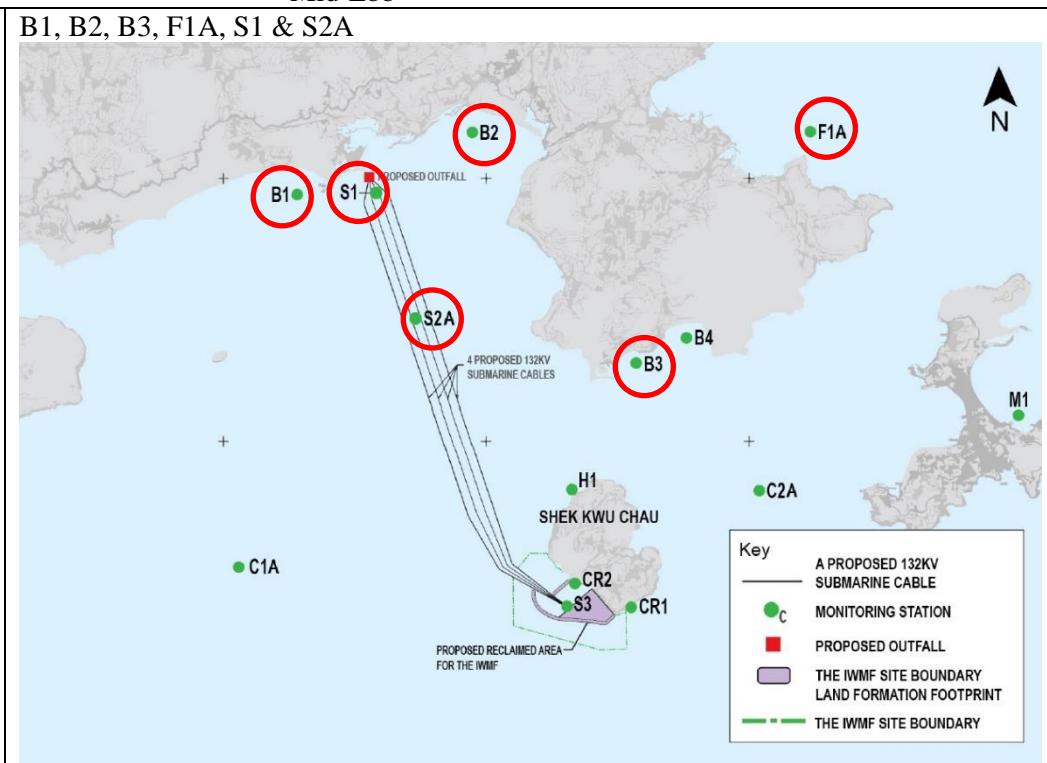
From MMO monitoring records on 02/12, MMO teams were arranged for seven derrick barges (GD853, GD851, UDL-2, Cheung Kee No.10, DL5, 永照 18 & 宏建 3) and two DCM barges (ESC-61 & ESC-62) on that day while no deficiency of silt curtain was found before the commencement of and during construction activity.

According to the field observation by sampling team & Marine Mammal Observer team during sampling event, no silt plume was observed in the Project site.

Site tidiness in the present barges in the Project site were checked during weekly site inspection on 26/11 while small amount of sediment was found at the edge of 宏建 1. However, according to the rationale in previous paragraphs, this observation might not contribute to the increase of the suspended solids recorded.

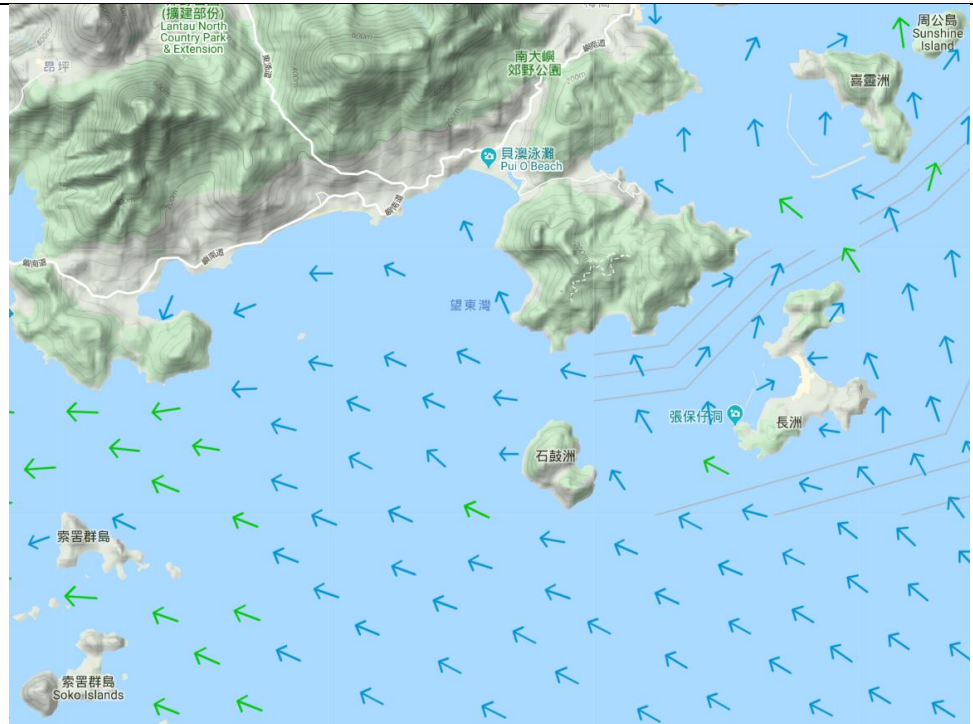
Mid-Ebb

Monitoring Location

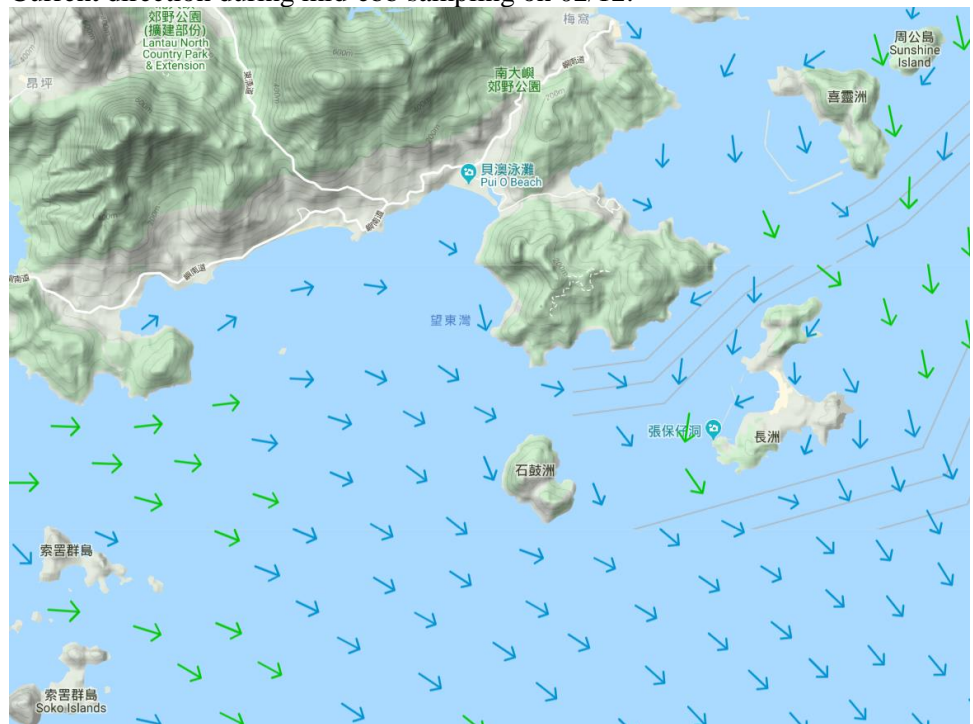


Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 10.2 mg/L (120% of C1A)		≥ 11.1 mg/L (130% of C1A)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	16.3 mg/L (B1) 17.8 mg/L (B2) 16.5 mg/L (B3) 12.5 mg/L (F1A) 12.0 mg/L (S1) 11.8 mg/L (S2A)	8.5 mg/L (C1A) 10.2 mg/L (C2A)	9.5 mg/L (B4) 9.7 mg/L (H1) 8.5 mg/L (M1) 8.8 mg/L (CR1) 7.7 mg/L (CR2) 8.7 mg/L (S3)
Possible reason for Action or	Works scheduled on site on 02/12 include DCM main works, DCM sample coring for		

<p>Limit Level Non-compliance</p>	<p>DCM main works, cone penetration test, removal of the slag materials, levelling the slag materials, laying sand blanket, levelling of rock fill, levelling the sand blanket, rock filling works and dredging,</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, F1A, S1 &amp; S2A are located at unrelated stream direction (neither upstream nor downstream, far away) to the works location, exceedances of these monitoring stations are deemed to be unrelated to the Project.</p> <p>Silt curtain checking was implemented on DL5 (07:00), ESC-61 (07:00), ESC-62 (07:00), GD851 (07:00), GD853 (07:00), UDL-2 (19:00), 宏建 3 (07:00), 永照 18 (07:00) &amp; Cheung Kee No.10 (07:00) and checking results showed that no deficiency of silt curtain was found on that day. According to the site document provided by the Contractor, no works record of 宏建 2 was stated in the site diary on that day.</p> <p>From MMO monitoring records on 02/12, MMO teams were arranged for seven derrick barges (GD853, GD851, UDL-2, Cheung Kee No.10, DL5, 永照 18 &amp; 宏建 3) and two DCM barges (ESC-61 &amp; ESC-62) on that day while no deficiency of silt curtain was found the commencement of and during construction activity.</p> <p>According to the field observation by sampling team &amp; Marine Mammal Observer team during sampling event, no silt plume was observed in the Project site.</p> <p>Site tidiness in the present barges in the Project site were checked during weekly site inspection on 26/11 while small amount of sediment was found at the edge of 宏建 1. However, according to the rationale in previous paragraphs, this observation might not contribute to the increase of the suspended solids recorded.</p>
<p>Actions taken / to be taken</p>	<p>Sediment at the edge of 宏建 1 had been cleaned on 28 Nov 2019. The Contractor was reminded to clean the accumulated sediment regularly to prevent falling into the sea.</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&amp;A Manual.</p>
<p>Remarks</p>	<p>Current direction during mid-flood sampling on 02/12:</p>



Current direction during mid-ebb sampling on 02/12:



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

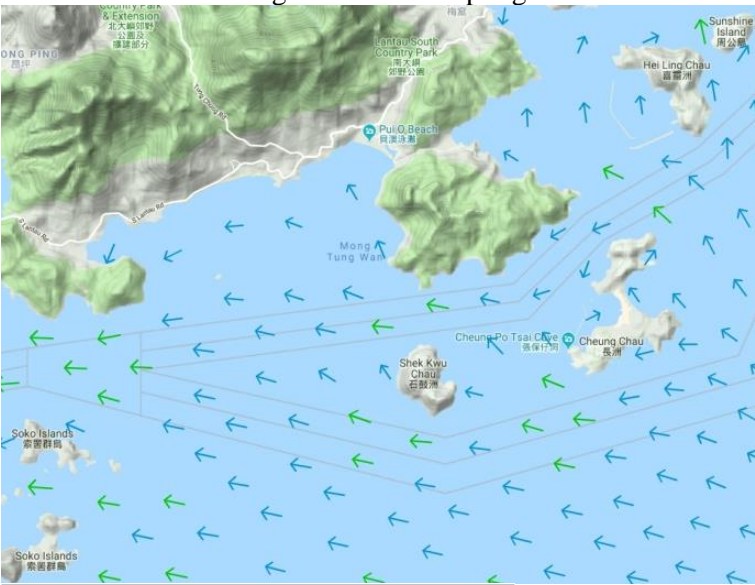
(Sourced from <http://current.hydro.gov.hk/en/map.html>)

Prepared by	Polar Chan
Date	11 Dec 2019

**Incident Report on Action Level or Limit Level Non-compliance**


Project	Integrated Waste Management Facilities, Phase 1		
Date	06 Dec 2019 (Lab result received on 11 Dec 2019)		
Time	08:07 – 11:37 (Mid-Flood)		
Mid-Flood			
Monitoring Location	B2, S2A & S3		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 9.0 mg/L (120% of C2A)		≥ 10.0 mg/L
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	10.0 mg/L (B2) 10.3 mg/L (S2A) 9.2 mg/L (S3)	8.3 mg/L (C1A) 7.5 mg/L (C2A)	7.0 mg/L (B1) 8.8 mg/L (B3) 8.8 mg/L (B4) 8.3 mg/L (F1A) 8.0 mg/L (H1) 8.0 mg/L (M1) 8.8 mg/L (CR1) 7.8 mg/L (CR2) 8.8 mg/L (S1)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 06/12 include DCM main works, DCM sample coring for DCM main works, cone penetration test, removal of the slag materials, levelling the slag materials, levelling of rock fill, removal steel gate of caisson, laying sand blanket, rock filling works and dredging,</p> <p>Dominating sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>B2 and S2A are located at unrelated stream direction (neither upstream nor downstream, far away) to the works location, exceedances of these monitoring stations are deemed to be unrelated to the Project.</p> <p>S3 is located close to the works location within the Project Site while silt curtain</p>		



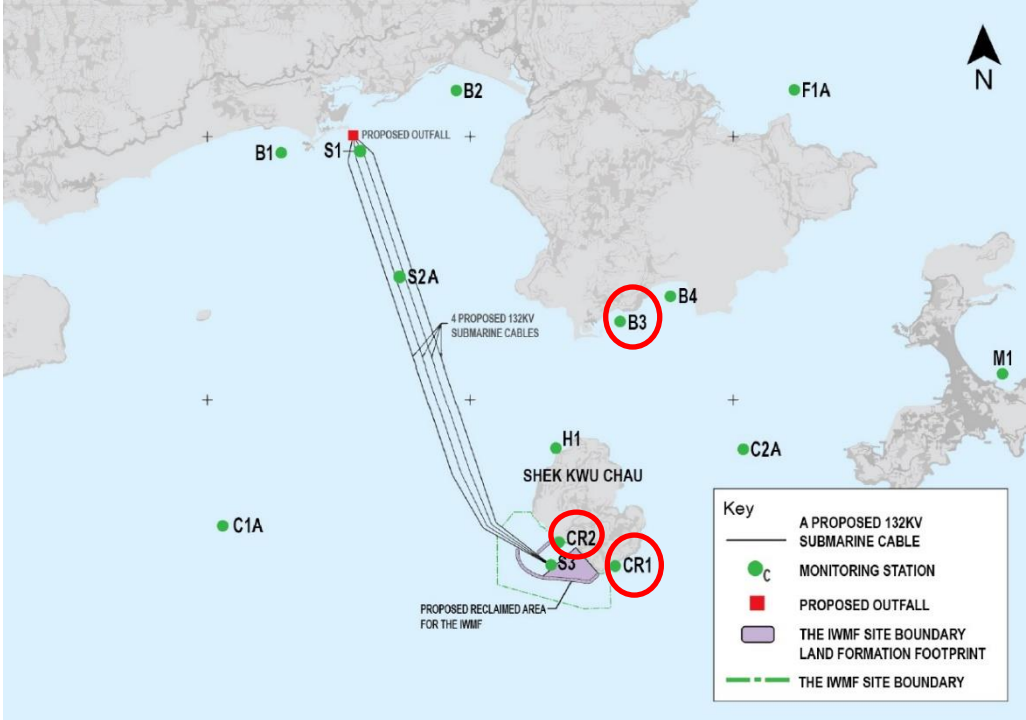
	<p>checking was implemented on GD851 (07:00), GD853 (07:00), GD108 (17:00), UDL-2 (07:00), 宏建 1 (07:00), 宏建 2 (20:00), 宏建 3 (07:00), 永照 18 (07:00) &amp; Cheung Kee No.10 (07:00) and checking results showed that no deficiency of silt curtain was found on that day. No DCM works scheduled on ESC-61 &amp; ESC-62 were carried out on that day with refer to the site diary. According to the site document provided by the Contractor, no works record of 宏建 5 was stated in the site diary on that day.</p> <p>From MMO monitoring records on 06/12, MMO teams were arranged for ten derrick barges (GD853, GD851, GD108, 宏建 1, 宏建 2, 宏建 3, 宏建 5, Cheung Kee No.10, 永照 18, UDL-2) and two DCM barges (ESC-61 &amp; ESC-62) on that day while no deficiency of silt curtain was found the commencement of and during construction activity.</p> <p>According to the field observation by sampling team &amp; Marine Mammal Observer team during sampling event, no silt plume was observed in the Project site. It might suggest that the SS exceedance at S3 is 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 4/12 while small amount of sediment was found at the edge of DL-5. However, according to the rationale in previous paragraphs, this observation might not contribute to the increase of the suspended solids recorded.</p>
<p>Actions taken / to be taken</p>	<p>Sediment at the edge of DL-5 had been cleaned on 5 Dec 2019. The Contractor was reminded to clean the accumulated sediment regularly to prevent falling into the sea.</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&amp;A Manual.</p>
<p>Remarks</p>	<p>Current direction during mid-flood sampling on 06/12:</p>  <p>(Sourced from <a href="http://current.hydro.gov.hk/en/map.html">http://current.hydro.gov.hk/en/map.html</a>)</p>
<p>Prepared by</p>	<p>Polar Chan</p>
<p>Date</p>	<p>21 Dec 2019</p>

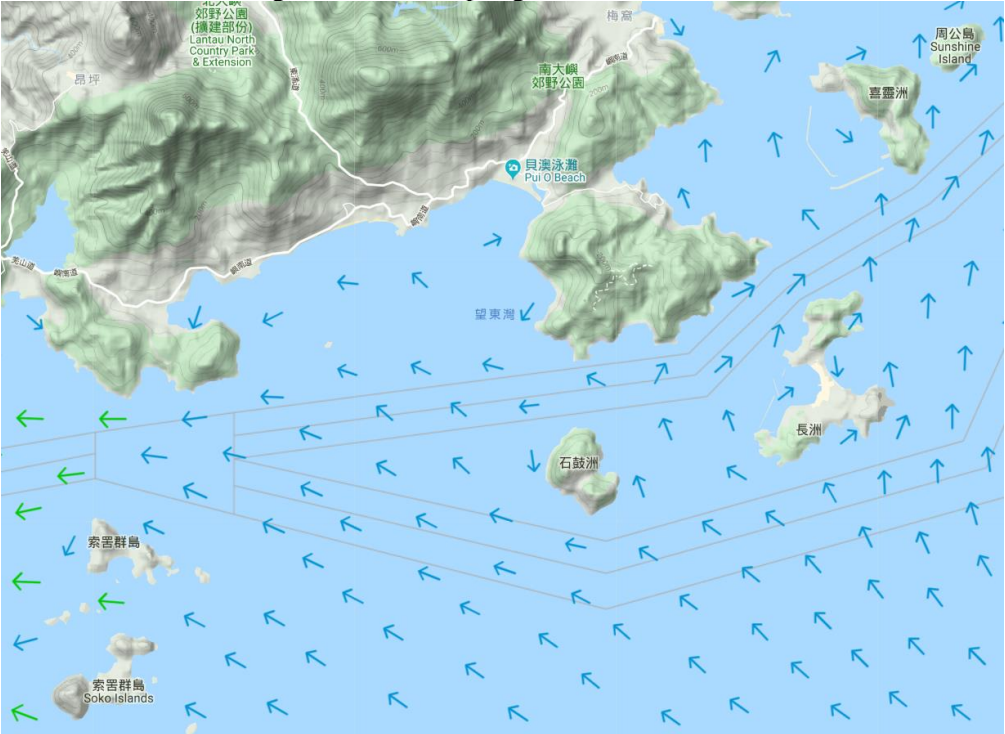
**Incident Report on Action Level or Limit Level Non-compliance**







Project	Integrated Waste Management Facilities, Phase 1		
Date	09 Dec 2019 (Lab result received on 13 Dec 2019)		
Time	08:29 – 11:59 (Mid-Ebb)		
Monitoring Location	<p style="text-align: center;">Mid-Ebb</p> <p>B1</p>		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 9.2 mg/L (120% of C1A)		≥ 10.0 mg/L
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	9.3 mg/L (B1)	7.7 mg/L (C1A) 7.7 mg/L (C2A)	5.5 mg/L (B2) 8.3 mg/L (B3) 8.0 mg/L (B4) 6.3 mg/L (F1A) 8.7 mg/L (H1) 6.7 mg/L (M1) 8.0 mg/L (CR1) 5.5 mg/L (CR2) 9.0 mg/L (S1) 5.8 mg/L (S2A) 7.8 mg/L (S3)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 09/12 include DCM main works, DCM sample coring for DCM main works, cone penetration test, removal of G200 rock materials, levelling the slag materials, levelling the sand materials, remove steel gate for caisson, diving works for joint survey, loading slag material, infilling G75 rock material into caisson chamber and assisting installation of caisson unit.</p> <p>Dominating sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>B1 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</p>		

	<p>unrelated to the Project.</p> <p>Silt curtain checking was implemented on GD851 (07:00), GD853 (07:00), 宏建 5 (07:00), 宏建 3 (07:00), FTB 19 (07:00), 志富 (19:00), DL-5 (07:00) &amp; ESC-61 (07:00) and checking results showed that no deficiency of silt curtain was found on that day. No DCM works scheduled on ESC-62 was carried out with refer to the site diary on that day. According to site document provided from the Contractor, no works record of Cheung Kee No. 10 was stated in the site diary on that day.</p> <p>From MMO monitoring records on 09/12, MMO teams were arranged for eight derrick barges (GD853, 志富, GD851, FTB 19, DL-5, 宏建 3, 宏建 5 &amp; Cheung Kee No.10) and two DCM barges (ESC-61 &amp; ESC-62) on that day while no deficiency of silt curtain was found the commencement of and during construction activity.</p> <p>According to the field observation by sampling team &amp; Marine Mammal Observer team during sampling event, no silt plume was observed in the Project site.</p> <p>Site tidiness in the present barges in the Project site were checked during weekly site inspection on 4/12 while small amount of sediment was found at the edge of DL-5. However, according to the rationale in previous paragraphs, this observation might not contribute to the increase of the suspended solids recorded.</p>
<p>Actions taken / to be taken</p>	<p>Sediment at the edge of DL-5 had been cleaned on 5 Dec 2019. The Contractor was reminded to clean the accumulated sediment regularly to prevent falling into the sea.</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&amp;A Manual.</p>
<p>Remarks</p>	<p>Current direction during mid-ebb sampling on 09/12:</p>  <p>(Sourced from <a href="http://current.hydro.gov.hk/en/map.html">http://current.hydro.gov.hk/en/map.html</a>)</p>
<p>Prepared by</p>	<p>Polar Chan</p>
<p>Date</p>	<p>23 Dec 2019</p>

**Incident Report on Action Level or Limit Level Non-compliance**

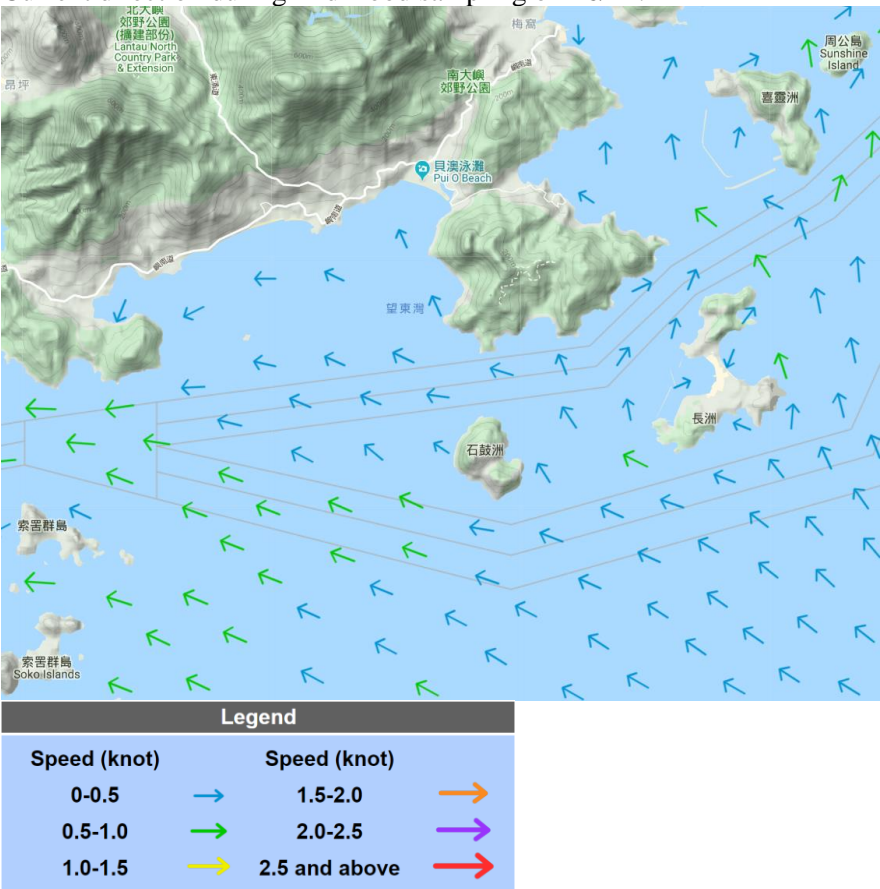
Project	Integrated Waste Management Facilities, Phase 1		
Date	13 Dec 2019 (Lab result received on 18 Dec 2019)		
Time	15:04 – 18:34 (Mid-Flood)		
Mid-Flood			
Monitoring Location	B3, CR1 & CR2 		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 10.8 mg/L (120% of C2A)		≥ 11.7 mg/L (130% of C2A)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	11.0 mg/L (B3) 13.0 mg/L (CR1) 11.8 mg/L (CR2)	7.8 mg/L (C1A) 9.0 mg/L (C2A)	7.8 mg/L (B1) 8.3 mg/L (B2) 9.0 mg/L (B4) 8.7 mg/L (F1A) 9.0 mg/L (H1) 10.3 mg/L (M1) 10.5 mg/L (S1) 9.5 mg/L (S2A) 10.2 mg/L (S3)
Possible reason for Action or Limit Level Non-compliance	<p>Works schedule on site on 13/12 include DCM main works, DCM sample coring for DCM main works, cone penetration test, levelling the slag materials, removal of G200 rock material, levelling of sand materials, levelling of rockfill, laying G200 rockfill, loading slag material and removal of steel gate.</p> <p>Dominating sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>B3 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>CR1 is located at upstream direction and CR2 is located close to works location</p>		

	<p>within the Project Site while silt curtain checking was implemented on DL-5 (22:00 @ 12/12), GD-851 (07:00), GD-853 (07:00), 宏建 3 (07:00), 永照 18 (07:00) &amp; 宏建 5 (07:00) and checking results showed that no deficiency of silt curtain was found on that day. No DCM works scheduled in ESC-61 &amp; ESC-62 were carried out on that day with refer to the site diary. As confirmed by the Contractor, DL-5 was operated before 7:00 am on 13/12, hence the silt curtain of DL-5 was checked on 12 Dec 2019.</p> <p>From MMO monitoring records on 13/12, MMO teams were arranged for six derrick barges (GD-853, GD-851, 宏建 5, DL-5, 宏建 3, 永照 18) and two DCM barges (ESC-61 &amp; ESC-62) on that day while no deficiency of silt curtain was found before the commencement of and during construction activity.</p> <p>According to the field observation by Marine Mammal Observer team &amp; sampling team during sampling event, no silt plume was observed in the Project site. It might suggest that exceedances at CR1 &amp; CR2 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 10/12 while small amount of sediment was found at the edge of 志富 and GD108. However, according to the rationale in previous paragraphs, this observation might not contribute to the increase of the suspended solids recorded.</p>
<p>Actions taken / to be taken</p>	<p>Sediment on 志富 and GD108 had been cleaned on 10 Dec 2019. The crane operator had been reminded to prevent dripping during the grabbing operation. The Contractor was reminded to clean the accumulated sediment regularly to prevent falling into the sea.</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&amp;A Manual.</p>
<p>Remarks</p>	<p>Current direction during mid-flood sampling on 13/12:</p> 

	<b>Legend</b>		
	<b>Speed (knot)</b>	<b>Speed (knot)</b>	
	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 <a href="http://current.hydro.gov.hk/en/map.html">http://current.hydro.gov.hk/en/map.html</a> )		
Prepared by	Polar Chan		
Date	27 Dec 2019		

**Incident Report on Action Level or Limit Level Non-compliance**

Project	Integrated Waste Management Facilities, Phase 1		
Date	16 Dec 2019 (Lab result received on 19 Dec 2019)		
Time	08:25 – 11:55 (Mid-Flood)		
Mid-Flood			
Monitoring Location	B1, B2, B3, B4 & H1		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 8.8 mg/L (120% of C2A)		≥ 10.0 mg/L
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	10.8 mg/L (B1) 13.3 mg/L (B2) 12.0 mg/L (B3) 11.5 mg/L (B4) 9.0 mg/L (H1)	6.2 mg/L (C1A) 7.3 mg/L (C2A)	7.0 mg/L (F1A) 5.8 mg/L (M1) 6.5 mg/L (CR1) 6.3 mg/L (CR2) 6.8 mg/L (S1) 7.7 mg/L (S2A) 7.3 mg/L (S3)
Possible reason for Action or Limit Level Non-compliance	<p>Works schedule on site on 16/12 include DCM main works, DCM sample coring for DCM main works, cone penetration test, levelling the slag materials, loading slag materials, infilling of G200 rock material, removal of G200 rock materials, levelling of sand blanket, levelling of sand materials, levelling of rockfill and laying of rockfill</p> <p>Dominating sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>B1, B2, B3 &amp; B4 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>H1 is located at downstream direction to the Project Site while silt curtain checking was implemented on DL-5 (07:00), FTB-19 (07:00), GD851 (07:00), GD853 (07:00), UDL-2 (07:00), 宏建 1 (21:30), 宏建 3 (07:00), 宏建 5 (07:00), 志富 (07:00) &amp; 港龍</p>		

	<p>108 (18:00) and checking results showed that no deficiency of silt curtain was found on that day. No DCM works scheduled in ESC-61 &amp; ESC-62 were carried out with refer to the site diary on that day.</p> <p>From MMO monitoring records on 16/12, MMO teams were arranged for ten derrick barges (GD853, GD851, UDL-2, 宏建 1, 志富, 宏建 3, 港龍 108, FTB-19, DL-5 &amp; 宏建 5) and two DCM barges (ESC-61 &amp; ESC-62) on that day while no deficiency of silt curtain was found before the commencement of and during construction activity.</p> <p>According to the field observation by Marine Mammal Observer &amp; sampling team during sampling event, no silt plume was observed in the Project site. It might suggest that exceedance at H1 is 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 10/12 while small amount of sediment was found at the edge of 志富 and GD108. However, according to the rationale in previous paragraphs, this observation might not contribute to the increase of the suspended solids recorded.</p>
<p>Actions taken / to be taken</p>	<p>Sediment on 志富 and GD108 had been cleaned on 10 Dec 2019. The crane operator had been reminded to prevent dripping during the grabbing operation. The Contractor was reminded to clean the accumulated sediment regularly to prevent falling into the sea.</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&amp;A Manual.</p>
<p>Remarks</p>	<p>Current direction during mid-flood sampling on 16/12:</p>  <p>(Sourced from <a href="http://current.hydro.gov.hk/en/map.html">http://current.hydro.gov.hk/en/map.html</a>)</p>
<p>Prepared by</p>	<p>Polar Chan</p>
<p>Date</p>	<p>27 Dec 2019</p>





**Incident Report on Action Level or Limit Level Non-compliance**

Project	Integrated Waste Management Facilities, Phase 1		
Date	20 Dec 2019 (Lab result received on 27 Dec 2019)		
Time	08:00 – 10:08 (Mid-Ebb) 12:07 – 15:37 (Mid-Flood)		
Mid-Ebb			
Monitoring Location	F1A, M1, CR1, CR2, S1, S2A & S3		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 9.2 mg/L (120% of C1A)		≥ 10.0 mg/L
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	10.0 mg/L (F1A) 11.5 mg/L (M1) 9.7 mg/L (CR1) 10.5 mg/L (CR2) 10.5 mg/L (S1) 9.3 mg/L (S2A) 9.5 mg/L (S3)	7.7 mg/L (C1A) 8.5 mg/L (C2A)	8.3 mg/L (B1) 7.0 mg/L (B2) 7.8 mg/L (B3) 8.5 mg/L (B4) 8.8 mg/L (H1)
Possible reason for Action or Limit Level Non-compliance	<p>Works schedule on site on 20/12 include DCM main works, DCM sample coring for DCM main works, cone penetration test, levelling the slag materials, loading slag materials, infilling of G200 rock material, laying sand blanket, laying of rockfill and dredging.</p> <p>Dominating sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>F1A, M1, S1 &amp; S2A 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>CR1 is located at downstream direction, CR2 &amp; S3 are located close to the works location within the Project Site while silt curtain checking was implemented on ESC-</p>		

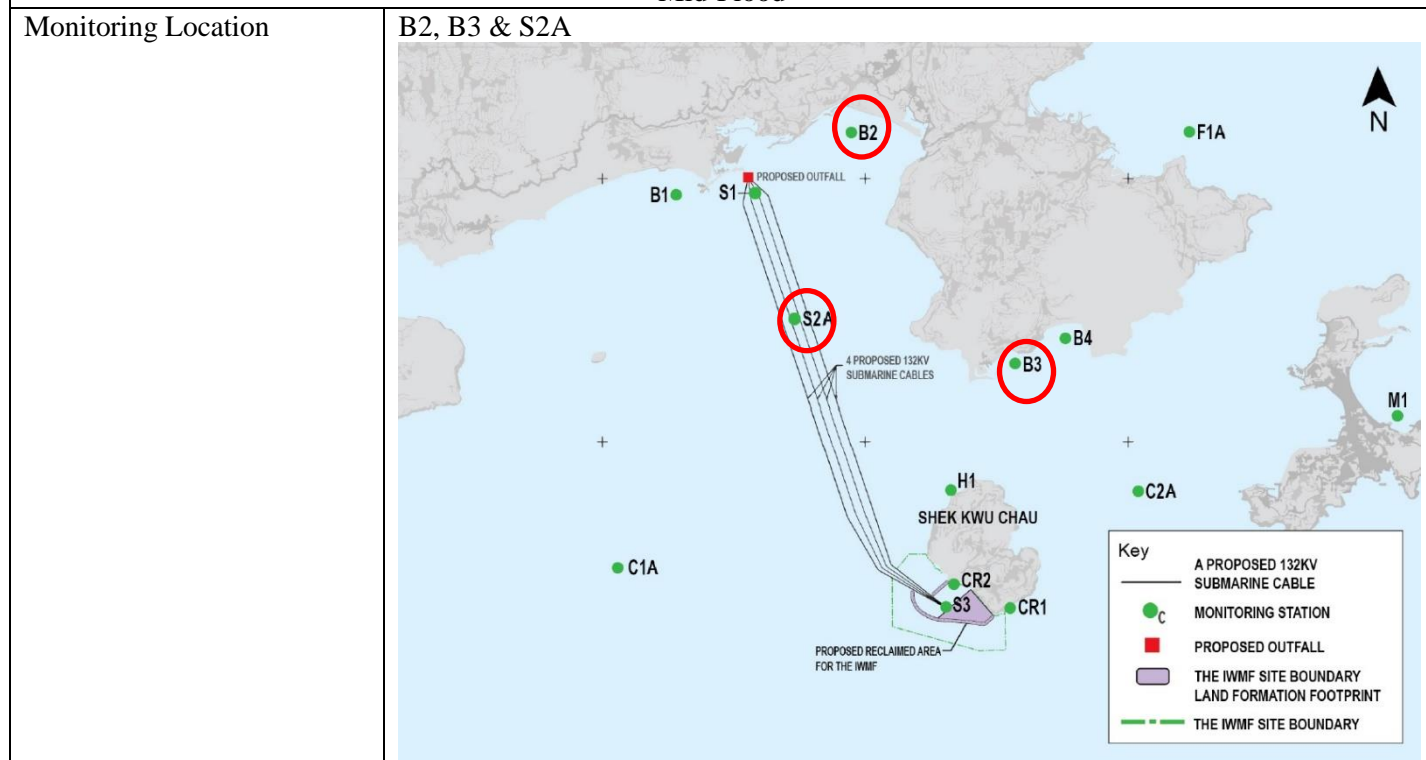
61 (07:00), GD-851 (07:00), UDL-2 (07:00@19/12), 宏建 3 (07:00), 宏建 5 (07:00), 志富 (10:00), 永高 (07:00), 港龍 108 (07:00) & Cheung Kee No.10 (20:00) and checking results showed that no deficiency of silt curtain was found on that day. As confirmed by the Contractor, UDL-2 was only operated before 07:00 on 20/12, hence the silt curtain of UDL-2 was checked on 19/12. No G200 rock infilling works scheduled in 永照 18 with refer to the site diary on that day. According to the site information from the Contractor, no works record of Cheung Kee No.7 was stated in the site diary on that day.

From MMO monitoring records on 20/12, MMO teams were arranged for ten derrick barges (GD851, UDL-2, 永照 18, 永高, 志富, 宏建 3, 港龍 108, Cheung Kee No.7, Cheung Kee No.10 & 宏建 5) and one DCM barge (ESC-61) on that day while no deficiency of silt curtain was found before the commencement of and during construction activity.

According to the field observation by Marine Mammal Observer team & sampling team during sampling event, no silt plume was observed in the Project site. It might suggest that the exceedances at CR1, CR2 & S3 are deemed to be unrelated to the Project.

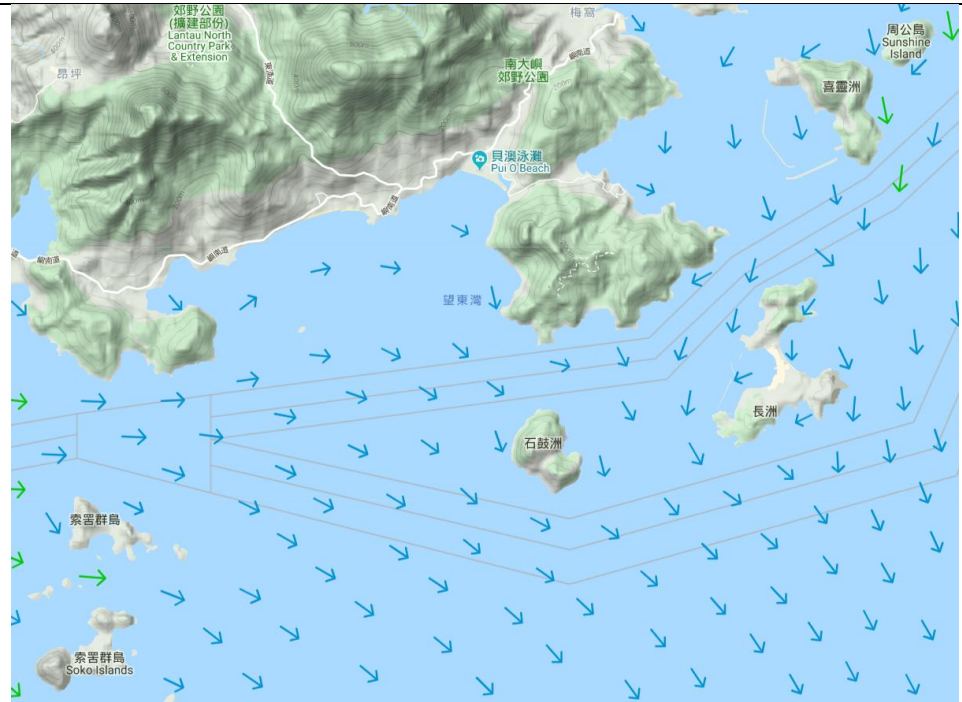
Site tidiness in the present barges in the Project site were checked during weekly site inspection on 18/12 while some broken parts of silt curtain were observed on ESC-62. However, according to the rationale in previous paragraphs, this observation might not contribute to the increase of the suspended solids recorded.

Mid-Flood

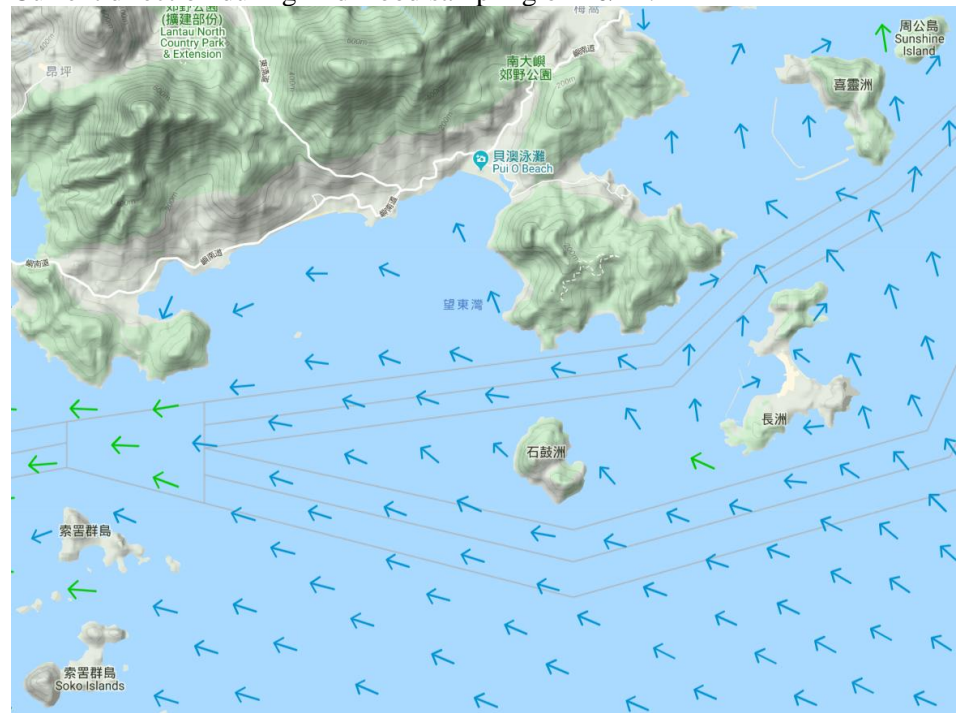


Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level ≥ 8.8 mg/L (120% of C2A)		Limit Level ≥ 10.0 mg/L
Measurement Level	Impact Station(s) of Exceedance 9.5 mg/L (B2) 9.3 mg/L (B3) 9.5 mg/L (S2A)	Control Stations 6.3 mg/L (C1A) 7.3 mg/L (C2A)	Impact Station(s) without Exceedance 7.8 mg/L (B1) 7.8 mg/L (B4) 6.0 mg/L (F1A)

			7.7 mg/L (H1) 8.5 mg/L (M1) 8.5 mg/L (CR1) 8.7 mg/L (CR2) 6.5 mg/L (S1) 8.7 mg/L (S3)
Possible reason for Action or Limit Level Non-compliance	<p>Works schedule on site on 20/12 include DCM main works, DCM sample coring for DCM main works, cone penetration test, levelling the slag materials, loading slag materials, infilling of G200 rock material, laying sand blanket, laying of rockfill and dredging.</p> <p>Dominating sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>B2, B3 &amp; S2A 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>Silt curtain checking was implemented on ESC-61 (07:00), GD-851 (07:00), UDL-2 (07:00@19/12), 宏建 3 (07:00), 宏建 5 (07:00), 志富 (10:00), 永高 (07:00), 港龍 108 (07:00) &amp; Cheung Kee No.10 (20:00) and checking results showed that no deficiency of silt curtain was found on that day. As confirmed by the Contractor, UDL-2 was only operated before 07:00 on 20/12, hence the silt curtain of UDL-2 was checked on 19/12. No G200 rock infilling works scheduled in 永照 18 with refer to the site diary on that day. According to the site information from the Contractor, no works record of Cheung Kee No.7 was stated in the site diary on that day.</p> <p>From MMO monitoring records on 20/12, MMO teams were arranged for ten derrick barges (GD851, UDL-2, 永照 18, 永高, 志富, 宏建 3, 港龍 108, Cheung Kee No.7, Cheung Kee No.10 &amp; 宏建 5) and one DCM barge (ESC-61) on that day while no deficiency of silt curtain was found before the commencement of and during construction activity.</p> <p>According to the field observation by Marine Mammal Observer team &amp; sampling team during sampling event, no silt plume was observed in the Project site.</p> <p>Site tidiness in the present barges in the Project site were checked during weekly site inspection on 18/12 while some broken parts of silt curtain were observed on ESC-62. However, according to the rationale in previous paragraphs, this observation might not contribute to the increase of the suspended solids recorded.</p>		
Actions taken / to be taken	<p>The silt curtain of ESC-62 has been repaired before returning to shipyard on 19 Dec 2019 for further maintenance. The Contractor was reminded to keep the deposited silt curtain in good position and condition.</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&amp;A Manual.</p>		
Remarks	Current direction during mid-ebb sampling on 20/12:		



Current direction during mid-flood sampling on 20/12:



Legend			
Speed (knot)	Color	Speed (knot)	Color
0-0.5	Blue arrow	1.5-2.0	Orange arrow
0.5-1.0	Green arrow	2.0-2.5	Purple arrow
1.0-1.5	Yellow arrow	2.5 and above	Red arrow

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

Prepared by	Polar Chan
Date	07 Jan 2020

**Incident Report on Action Level or Limit Level Non-compliance**

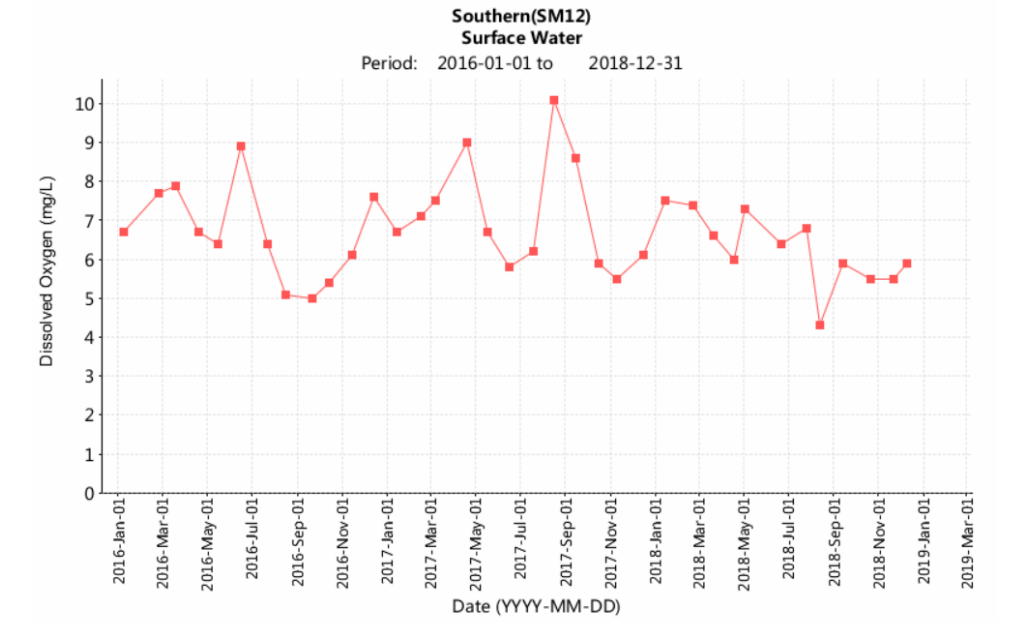
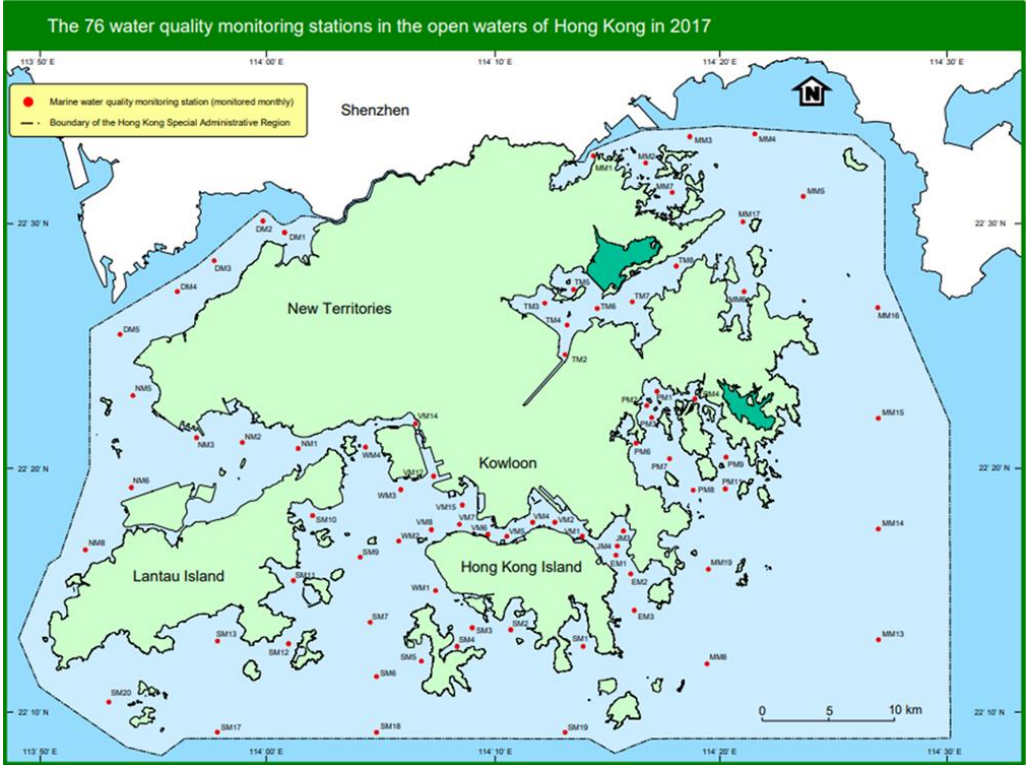
Project	Integrated Waste Management Facilities, Phase 1		
Date	22 December 2019		
Time	08:00 – 11:30 (Mid-Ebb) 13:33 – 17:03 (Mid-Flood)		
Mid-Ebb			
Monitoring Location	B1, B2, B3, B4, C1A, C2A, F1A, M1, CR1, CR2, S1, S2A & S3		
	<p>The map displays the project area near Shek Kwu Chau. It shows four proposed 132kV submarine cables extending from the reclaimed area. Monitoring stations are marked with green dots and red circles: B1, B2, B3, B4, C1A, C2A, F1A, M1, CR1, CR2, S1, S2A, and S3. A red square indicates the proposed outfall. A legend identifies symbols for submarine cables, monitoring stations, outfalls, IWMF site boundaries, and land formation footprints.</p>		
Parameter	Dissolved Oxygen (DO)		
Action & Limit Levels	Action Level	Limit Level	
	≤ 7.13 mg/L	≤ 4.00 mg/L	
Measurement Level	Impact Station(s) with Exceedance	Control Stations	Impact Station(s) without Exceedance
	6.88 mg/L (B1) 6.96 mg/L (B2) 6.86 mg/L (B3) 6.88 mg/L (B4) 7.07 mg/L (F1A) 7.04 mg/L (H1) 7.04 mg/L (M1) 6.92 mg/L (CR1) 6.76 mg/L (CR2) 6.84 mg/L (S1) 7.04 mg/L (S2A) 6.88 mg/L (S3)	6.93 mg/L (C1A) 6.93 mg/L (C2A)	
Possible reason for Action or Limit Level Non-compliance	All monitoring stations including control stations C1A & C2A exhibited low and similar DO level.		
	By reviewing the DO monitoring data in December 2018 of the Project, a seasonal fluctuation of DO level was observed in surrounding waters.		
	By reviewing the available data from EPD, the DO level of marine water monitoring stations SM12 & SM13 in December 2016, December 2017 & December 2018 is also below Action Level (7.13 mg/L) during dry season. Considering the absence of		

	distinct low DO at the impact stations near to the Project Site and plausible seasonal factor, it is concluded that exceedance of Action level of DO at all monitoring stations are related to surrounding weather conditions and deemed to be unrelated to the Project.		
<b>Mid-Flood</b>			
Monitoring Location	B1, B2, B3, B4, C1A, C2A, F1A, H1, M1, CR1, CR2, S1, S2A & S3		
Parameter	Dissolved Oxygen (DO)		
Action & Limit Levels	Action Level		Limit Level
	≤ 7.13 mg/L		≤ 4.00 mg/L
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	6.91 mg/L (B1) 6.83 mg/L (B2) 6.99 mg/L (B3) 6.84 mg/L (B4) 6.95 mg/L (F1A) 6.91 mg/L (H1) 6.88 mg/L (M1) 6.91 mg/L (CR1) 6.71 mg/L (CR2) 6.97 mg/L (S1) 6.86 mg/L (S2A) 7.05 mg/L (S3)	6.91 mg/L (C1A) 6.86 mg/L (C2A)	
Possible reason for Action or Limit Level Non-compliance	All monitoring stations including control stations C1A & C2A exhibited low and similar DO level.		
	By reviewing the DO monitoring data in December 2018 of the Project, a seasonal fluctuation of DO level was observed in surrounding waters.		
	By reviewing the available data from EPD, the DO level of marine water monitoring stations SM12 & SM13 in December 2016, December 2017 & December 2018 is also below Action Level (7.13 mg/L) during dry season. Considering the absence of distinct low DO at the impact stations near to the Project Site and plausible seasonal factor, it is concluded that exceedance of Action level of DO at these monitoring		

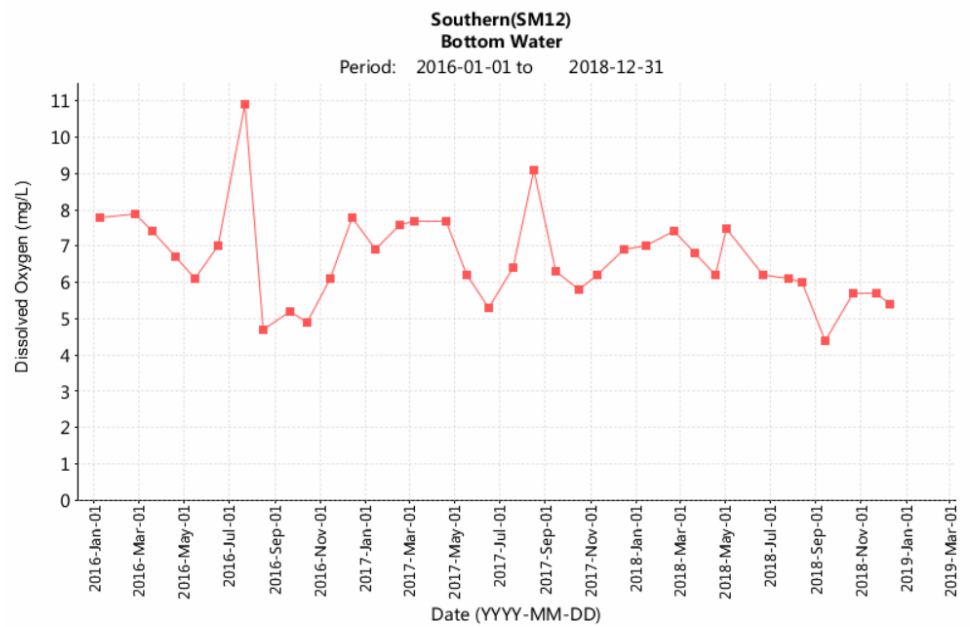
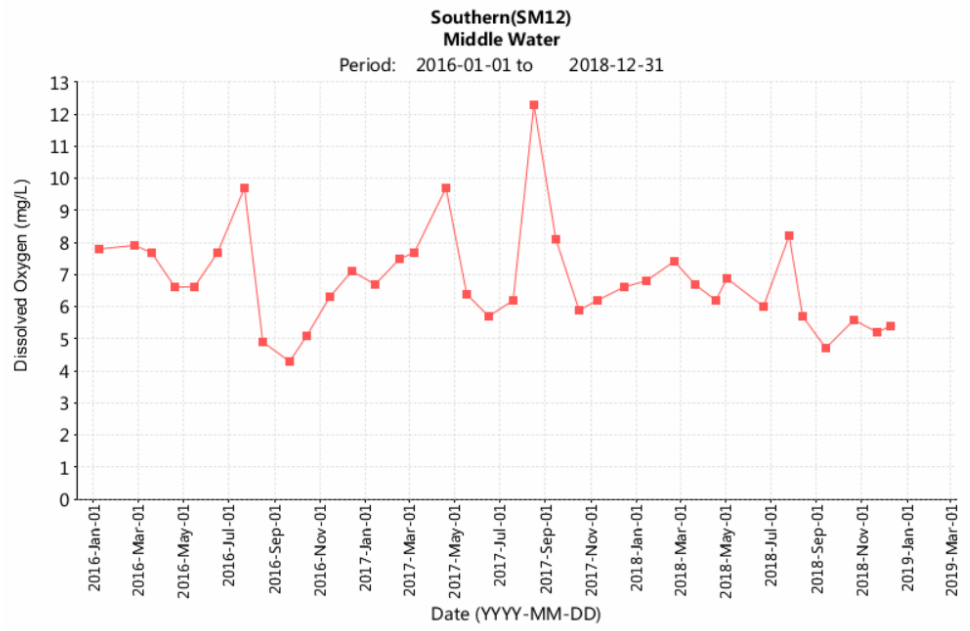
stations are related to surrounding weather conditions and deemed to be unrelated to the Project.

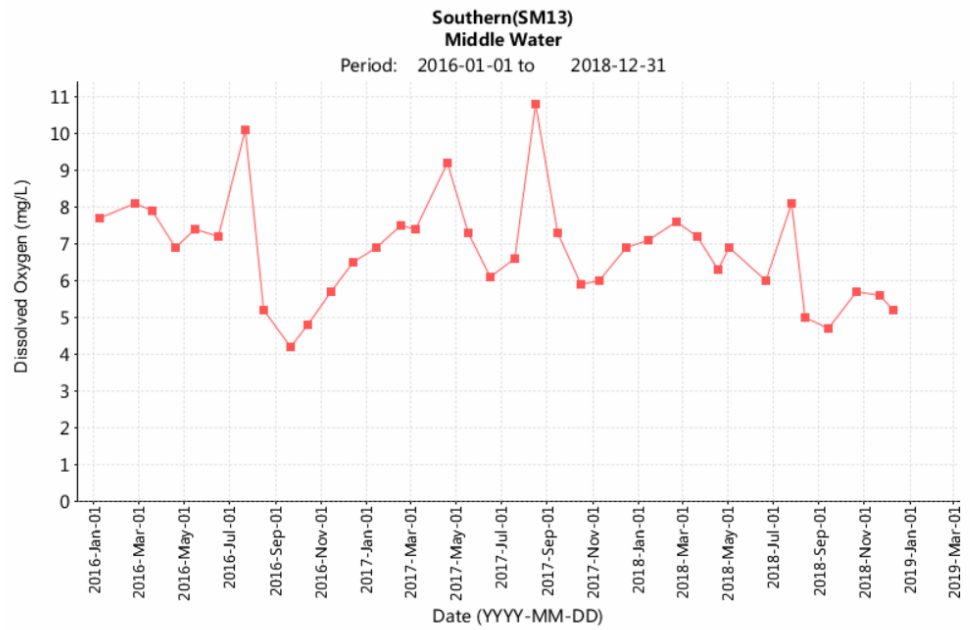
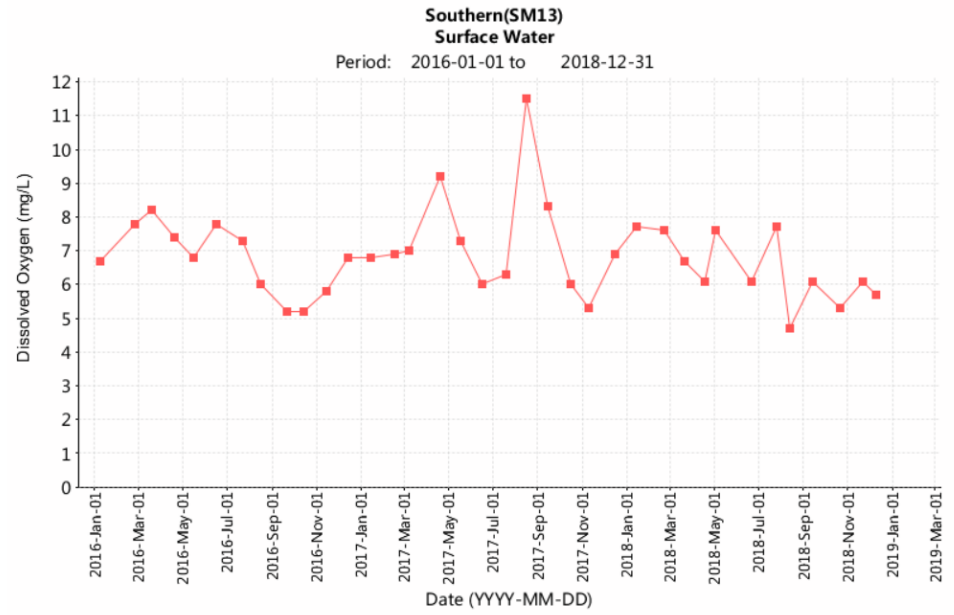
Actions taken / to be taken  
 Examination of environmental performance of the Project will be continued during the weekly inspection, and the Contractor is reminded to implement all applicable mitigation measures as per the Updated EM&A Manual.

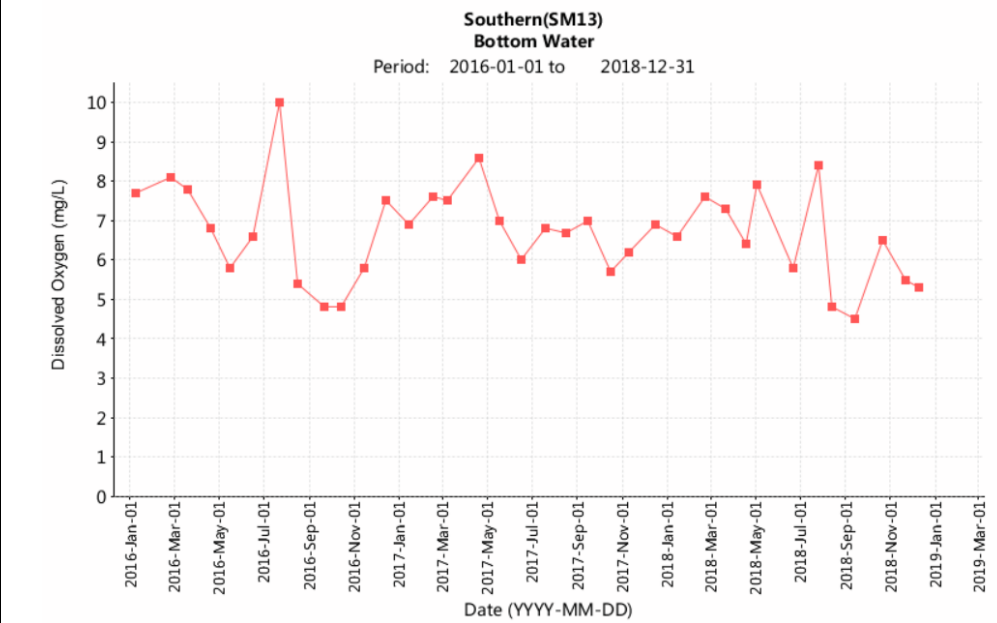
Remarks  
 Supporting figures of the EPD water data:



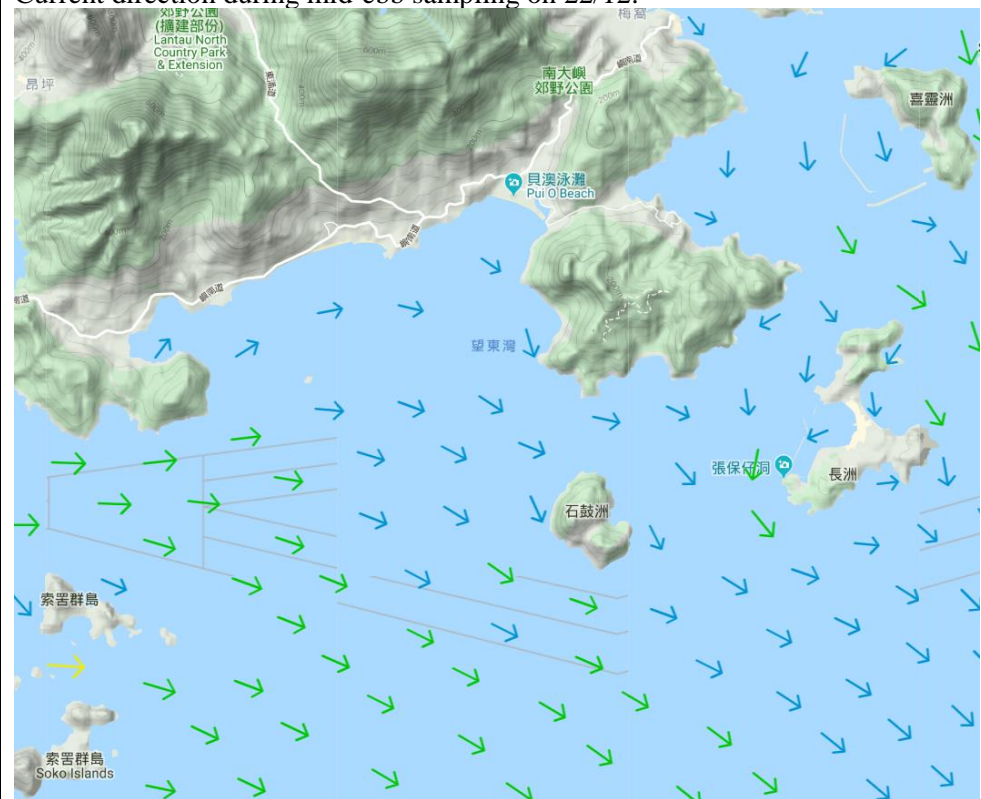




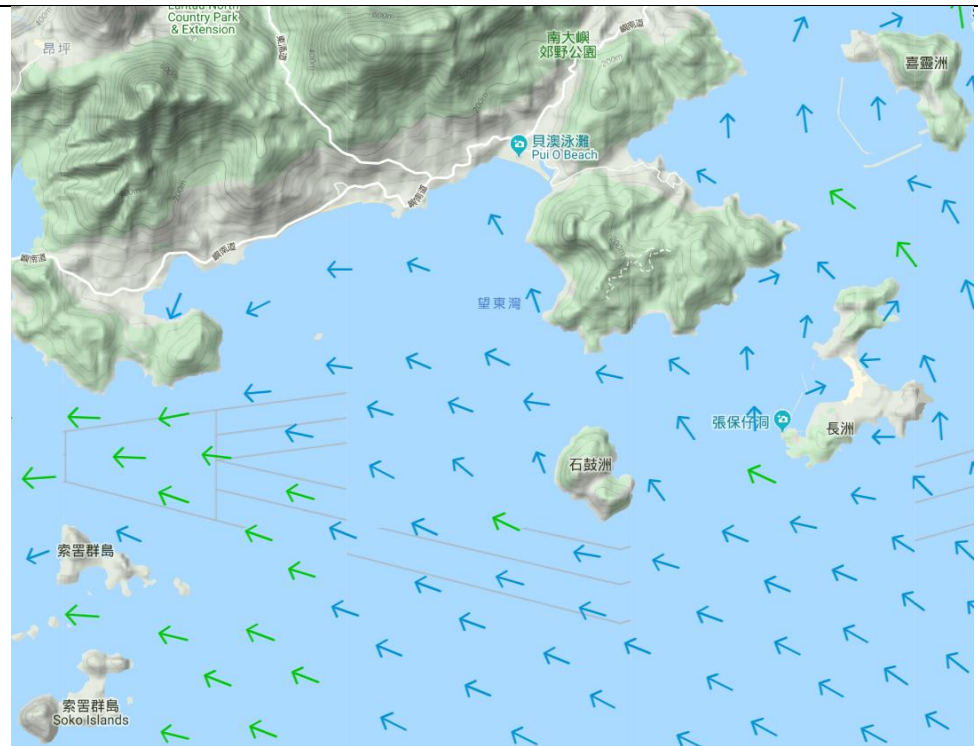




Current direction during mid-ebb sampling on 22/12:



Current direction during mid-flood sampling on 22/12:

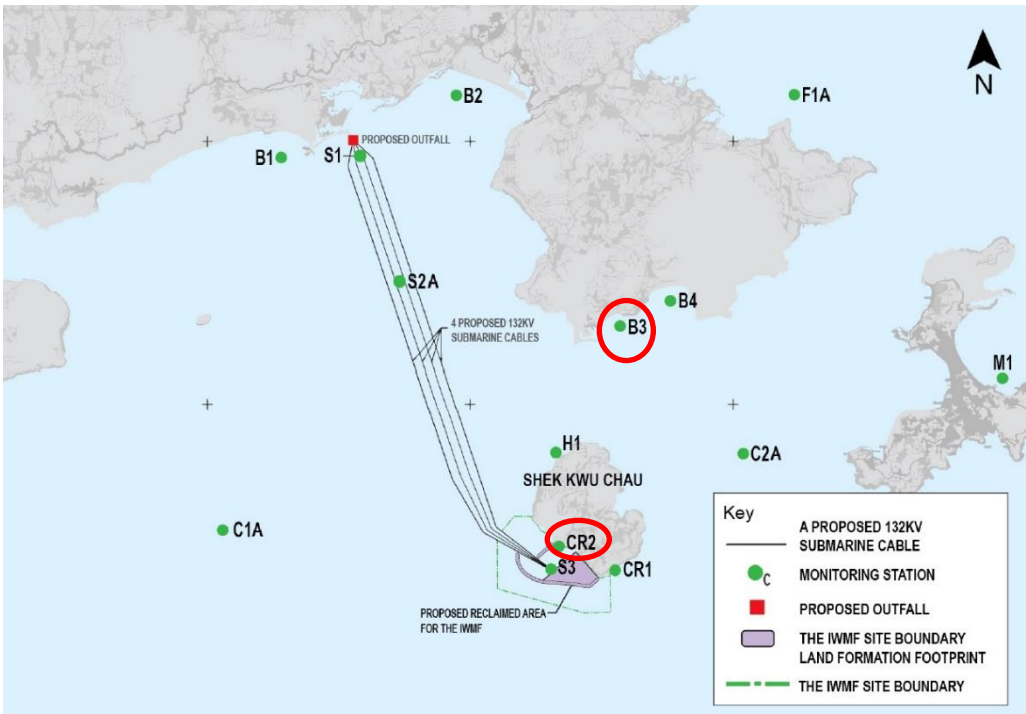


Legend	
Speed (knot)	Speed (knot)
0-0.5	1.5-2.0
0.5-1.0	2.0-2.5
1.0-1.5	2.5 and above

(Sourced from <https://cd.epic.epd.gov.hk/EPICRIVER/marine/history/> and <http://current.hydro.gov.hk/en/map.html>)

Prepared by	Polar Chan
Date	09 January 2020

**Incident Report on Action Level or Limit Level Non-compliance**

Project	Integrated Waste Management Facilities, Phase 1		
Date	24 Dec 2019 (Lab result received on 31 Dec 2019)		
Time	09:26 – 12:56 (Mid-Ebb) 14:47 – 18:17 (Mid-Flood)		
Mid-Ebb			
Monitoring Location	B3 & CR2 		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 11.2 mg/L (120% of C1A)		≥ 12.1 mg/L (130% of C1A)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	11.3 mg/L (B3) 11.3 mg/L (CR2)	9.3 mg/L (C1A) 8.8 mg/L (C2A)	6.8 mg/L (B1) 8.0 mg/L (B2) 8.3 mg/L (B4) 9.0 mg/L (F1A) 8.7 mg/L (H1) 9.8 mg/L (M1) 8.8 mg/L (CR1) 9.5 mg/L (S1) 5.8 mg/L (S2A) 7.7 mg/L (S3)
Possible reason for Action or Limit Level Non-compliance	<p>Works schedule on site on 24/12 include DCM main works, infilling of G200 rock material, DCM sample coring for DCM main works, cone penetration test, levelling the slag materials, dredging, removal of boulder, laying sand blanket, laying of rockfill, levelling of rockfill, installation of caisson and loading slag material.</p> <p>Dominating sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>B3 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>		

CR2 is located close to works location within the Project Site while silt curtain checking was implemented by the Contractor on ESC-61 (07:00), GD-851 (07:00), UDL-2 (07:00), 宏建 3 (07:00), 宏建 5 (07:00), 永照 18 (07:00), 港龍 108 (07:00) & Cheung Kee No.10 (19:00) and checking results showed that no deficiency of silt curtain was found on that day.

From MMO monitoring records on 24/12, MMO teams were arranged for seven derrick barges (Cheung Kee No.10, GD-851, 永照 18, 宏建 5, 宏建 3, UDL-2 & 港龍 108) and one DCM barge (ESC-61) on that day while no deficiency of silt curtain was found before the commencement of and during construction activity.

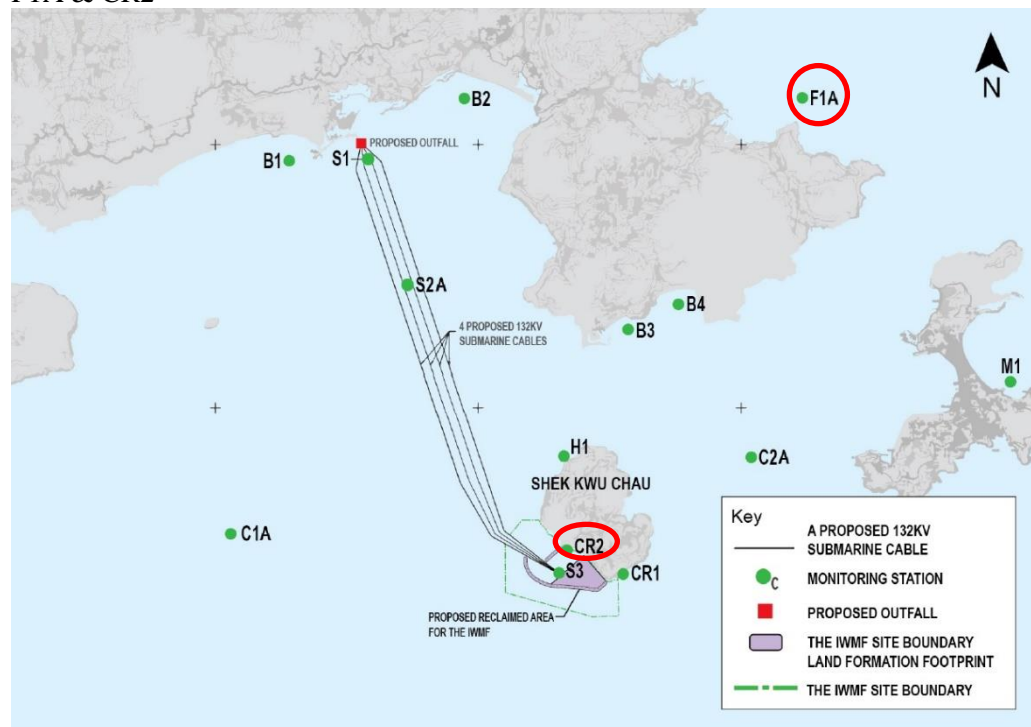
According to the field observation by Marine Mammal Observer team & sampling team during sampling event, no silt plume was observed in the Project site. It might suggest that the exceedance at CR2 is deemed to be unrelated to the Project.

Site tidiness in the present barges in the Project site were checked during weekly site inspection on 23/12. No major observation of improper site practices that could contribute to the increase of the suspended solids recorded.

Mid-Flood

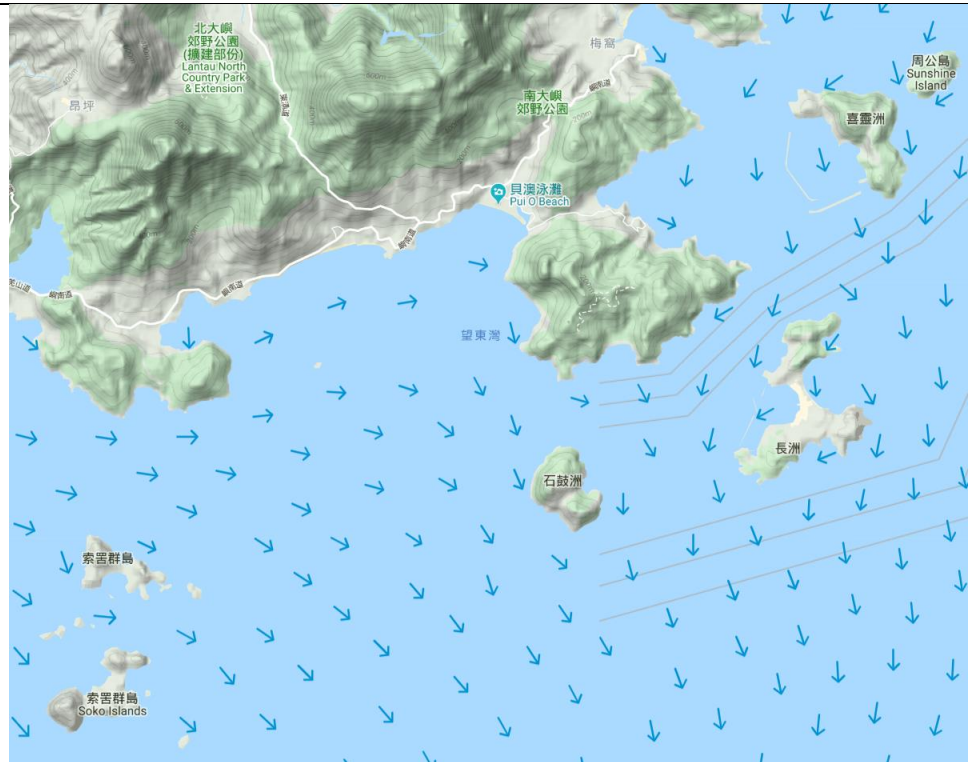
Monitoring Location

F1A & CR2

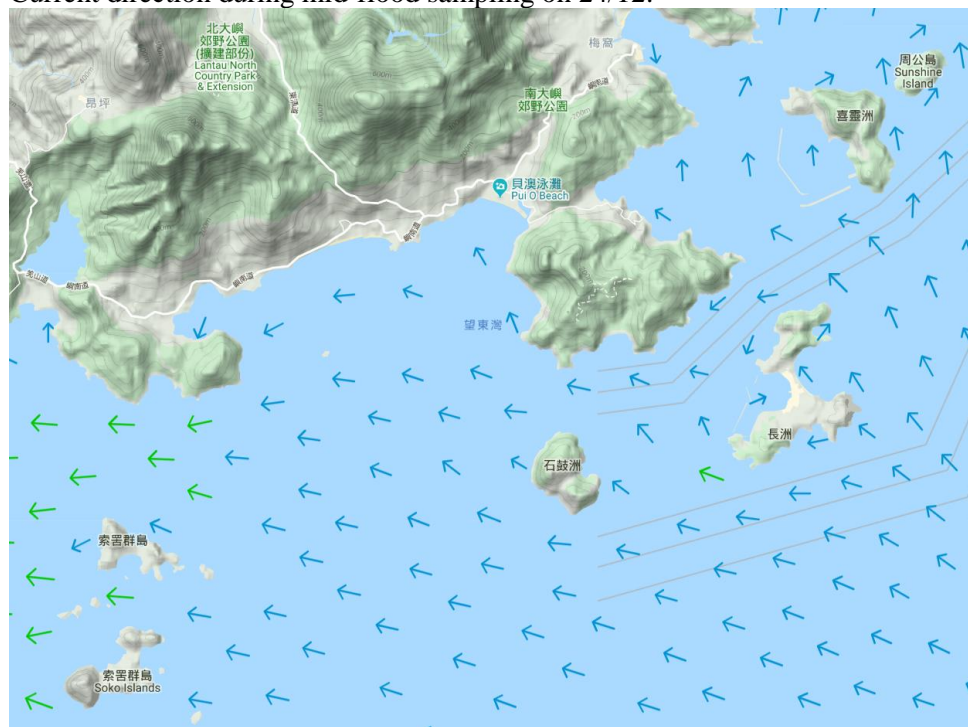


Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 8.2 mg/L (120% of C2A)		≥ 10.0 mg/L
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	8.3 mg/L (F1A) 9.3 mg/L (CR2)	6.7 mg/L (C1A) 6.8 mg/L (C2A)	4.8 mg/L (B1) 5.3 mg/L (B2) 5.5 mg/L (B3) 5.3 mg/L (B4) 6.2 mg/L (H1) 6.5 mg/L (M1) 7.0 mg/L (CR1) 5.3 mg/L (S1)

			7.0 mg/L (S2A) 7.5 mg/L (S3)
Possible reason for Action or Limit Level Non-compliance	<p>Works schedule on site on 24/12 include DCM main works, infilling of G200 rock material, DCM sample coring for DCM main works, cone penetration test, levelling the slag materials, dredging, removal of boulder, laying sand blanket, laying of rockfill, levelling of rockfill, installation of caisson and loading slag material.</p> <p>Dominating sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>F1A 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>CR2 is located close to works location within the Project Site while silt curtain checking was implemented by the Contractor on ESC-61 (07:00), GD-851 (07:00), UDL-2 (07:00), 宏建 3 (07:00), 宏建 5 (07:00), 永照 18 (07:00), 港龍 108 (07:00) &amp; Cheung Kee No.10 (19:00) and checking results showed that no deficiency of silt curtain was found on that day.</p> <p>From MMO monitoring records on 24/12, MMO teams were arranged for seven derrick barges (Cheung Kee No.10, GD-851, 永照 18, 宏建 5, 宏建 3, UDL-2 &amp; 港龍 108) and one DCM barge (ESC-61) on that day while no deficiency of silt curtain was found before the commencement of and during construction activity.</p> <p>According to the field observation by Marine Mammal Observer team &amp; sampling team during sampling event, no silt plume was observed in the Project site. It might suggest that the exceedance at CR2 is 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 23/12. No major observation of improper site practices that could contribute to the increase of the suspended solids recorded.</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 reminded to implement all applicable mitigation measures as per the Updated EM&amp;A Manual.</p>		
Remarks	<p>Current direction during mid-ebb sampling on 24/12:</p>		



Current direction during mid-flood sampling on 24/12:



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

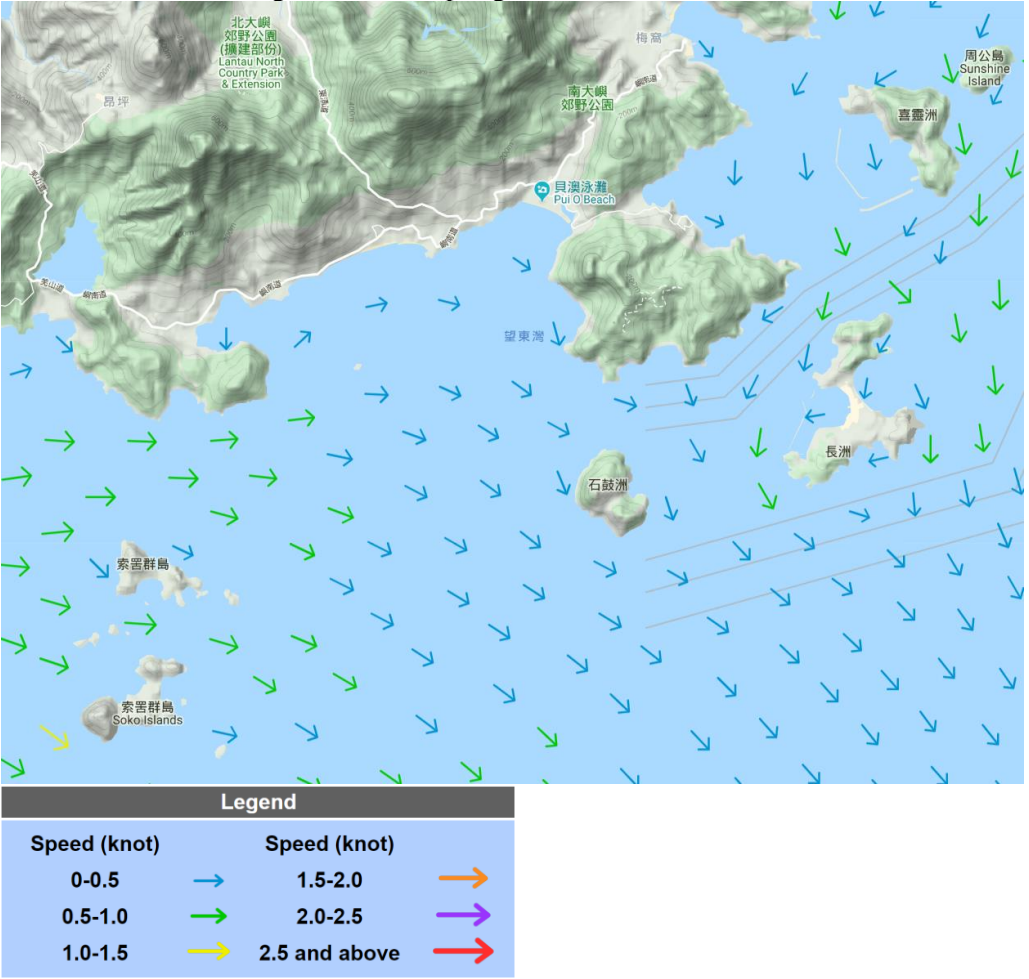
(Sourced from <http://current.hydro.gov.hk/en/map.html>)

Prepared by	Polar Chan
Date	03 Jan 2020

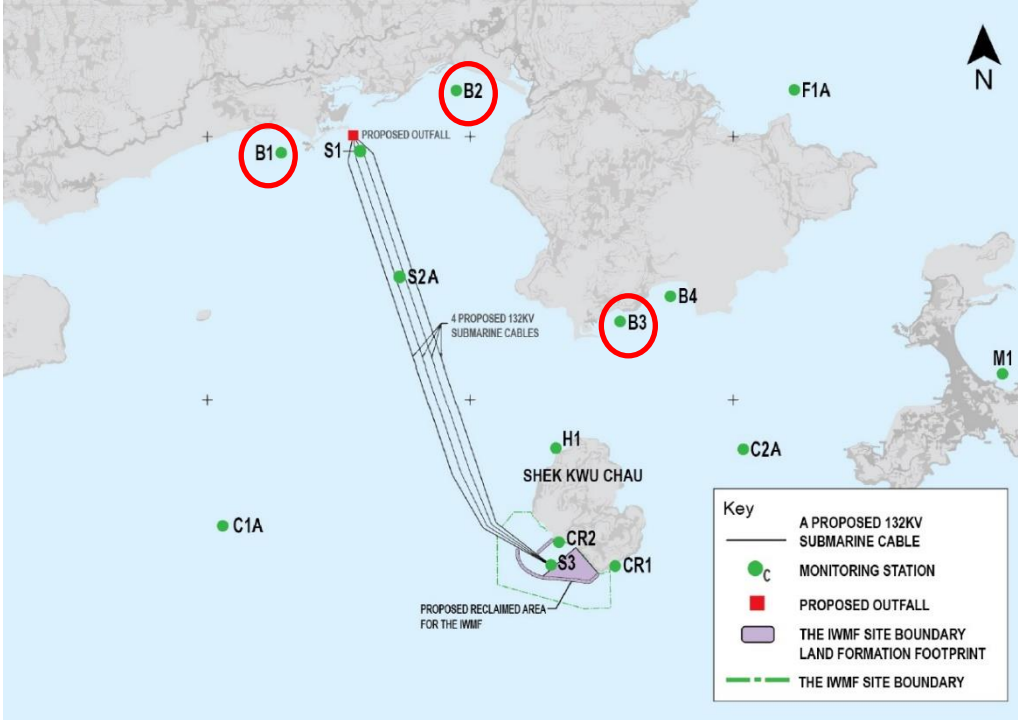


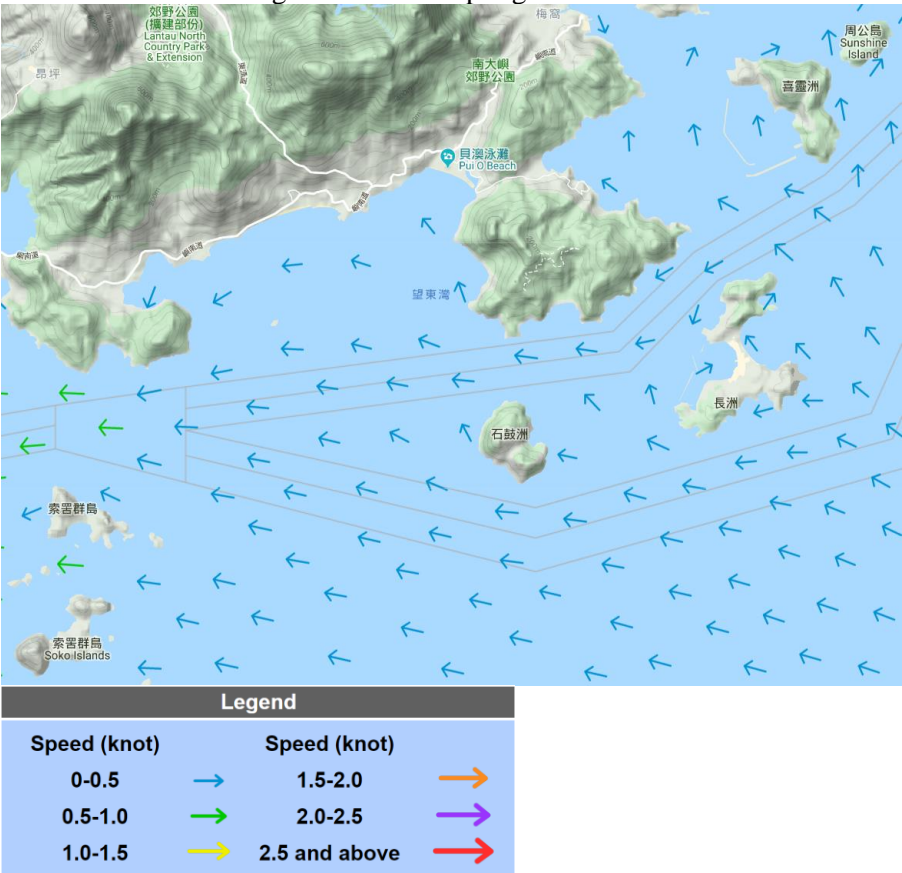
**Incident Report on Action Level or Limit Level Non-compliance**

Project	Integrated Waste Management Facilities, Phase 1		
Date	27 Dec 2019 (Lab result received on 02 Jan 2020)		
Time	11:40 – 15:10 (Mid-Ebb)		
Mid-Ebb			
Monitoring Location	B3, B4, F1A & S2A		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 10.0 mg/L (120% of C1A)		≥ 10.8 mg/L (130% of C1A)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	10.8 mg/L (B3) 11.0 mg/L (B4) 10.3 mg/L (F1A) 11.3 mg/L (S2A)	8.3 mg/L (C1A) 8.2 mg/L (C2A)	7.5 mg/L (B1) 9.3 mg/L (B2) 9.3 mg/L (H1) 8.0 mg/L (M1) 8.7 mg/L (CR1) 8.8 mg/L (CR2) 9.3 mg/L (S1) 9.3 mg/L (S3)
Possible reason for Action or Limit Level Non-compliance	<p>Works schedule on site on 27/12 include DCM main works, infilling of G200 rock material, DCM sample coring for DCM main works, cone penetration test, levelling the slag materials, dredging, levelling of sand blanket, loading of slag materials, repairing of silt curtain, laying of sand blanket, laying of rockfill and levelling of rockfill.</p> <p>Dominating sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>B3, B4, F1A &amp; S2A are located at unrelated stream direction (neither upstream nor downstream, far away) to the works location, exceedances of these monitoring stations are deemed to be unrelated to the Project.</p> <p>Silt curtain checking was implemented on DL4 (07:00), ESC-61 (07:00), GD-851</p>		

	<p>(07:00), UDL-2 (07:00), 宏建 3 (07:00), 志富 (07:00 @ 26/12), 港龍 108 (07:00 @ 26/12) &amp; Cheung Kee No.10 (07:00) and checking results showed that no deficiency of silt curtain was found on that day. As confirmed by the Contractor, 志富 &amp; 港龍 108 were only operated before 07:00 on 27/12, hence the silt curtains of 志富 &amp; 港龍 108 were checked on 26/12.</p> <p>From MMO monitoring records on 27/12, MMO teams were arranged for seven derrick barges (Cheung Kee No.10, GD-851, 宏建 3, 志富, UDL-2, 港龍 108 &amp; DL-4) and one DCM barge (ESC-61) on that day while no deficiency of silt curtain was found before the commencement of and during construction activity.</p> <p>According to the field observation by Marine Mammal Observer team &amp; sampling team during sampling event, no silt plume was observed in the Project site.</p> <p>Site tidiness in the present barges in the Project site were checked during weekly site inspection on 23/12. No major observation of improper site practices that could contribute to the increase of the suspended solids recorded.</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 reminded to implement all applicable mitigation measures as per the Updated EM&amp;A Manual.</p>
<p>Remarks</p>	<p>Current direction during mid-ebb sampling on 27/12:</p>  <p>(Sourced from <a href="http://current.hydro.gov.hk/en/map.html">http://current.hydro.gov.hk/en/map.html</a>)</p>
<p>Prepared by</p>	<p>Polar Chan</p>
<p>Date</p>	<p>03 Jan 2020</p>

**Interim Incident Report on Action Level or Limit Level Non-compliance**

Project	Integrated Waste Management Facilities, Phase 1		
Date	30 Dec 2019 (Lab result received on 07 Jan 2020)		
Time	08:22 – 11:52 (Mid-Flood)		
Mid-Flood			
Monitoring Location	B1, B2 & B3 		
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 (B1) 8.3 mg/L (B2) 8.3 mg/L (B3)	4.7 mg/L (C1A) 5.3 mg/L (C2A)	6.0 mg/L (B4) 4.0 mg/L (F1A) 5.3 mg/L (H1) 7.2 mg/L (M1) 5.7 mg/L (CR1) 5.2 mg/L (CR2) 6.3 mg/L (S1) 5.8 mg/L (S2A) 5.3 mg/L (S3)
Possible reason for Action or Limit Level Non-compliance	<p>Works schedule on site on 30/12 include DCM main works, infilling of caisson, DCM sample coring for DCM main works, cone penetration test, levelling the slag materials, dredging, levelling of sand blanket, loading slag materials, removal of boulder, laying sand blanket, laying of rockfill, levelling of rockfill, flattening of rockfill and installation of caisson.</p> <p>Dominating sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>B1, B2 &amp; B3 are located at unrelated stream direction (neither upstream nor downstream, far away) to the works location, exceedances of these monitoring station are deemed to be unrelated to the Project.</p>		

	<p>Silt curtain checking was implemented by the Contractor on GD-853 (07:00), 港龍 108 (13:00), 宏建 2 (07:00), 宏建 3 (07:00), 志富 (18:00) &amp; Cheung Kee No.10 (18:00) and checking results showed that no deficiency of silt curtain was found on that day. No DCM works scheduled in ESC-61 was carried out on that day with refer to the site diary.</p> <p>From MMO monitoring records on 30/12, MMO teams were arranged for six derrick barges (GD-853, 志富, 宏建 3, Cheung Kee No.10, 宏建 2 &amp; 港龍 108) and one DCM barge (ESC-61) on that day while no deficiency of silt curtain was found before the commencement of and during construction activity.</p> <p>According to the field observation by Marine Mammal Observer team &amp; sampling team during sampling event, no silt plume was observed in the Project site.</p> <p>Site tidiness in the present barges in the Project site were checked during weekly site inspection on 30/12 while garbage was observed inside the cage-type silt curtain on ESC-62. However, according to the rationale in previous paragraphs, this observation might not contribute to the increase of the suspended solids recorded.</p>
<p>Actions taken / to be taken</p>	<p>Garbage has been cleared up on 31 Dec 2019. The Contractor is reminded to keep good site tidiness.</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&amp;A Manual.</p>
<p>Remarks</p>	<p>Current direction during mid-flood sampling on 30/12:</p>  <p>(Sourced from <a href="http://current.hydro.gov.hk/en/map.html">http://current.hydro.gov.hk/en/map.html</a>)</p>
<p>Prepared by</p>	<p>Polar Chan</p>
<p>Date</p>	<p>08 Jan 2020</p>