

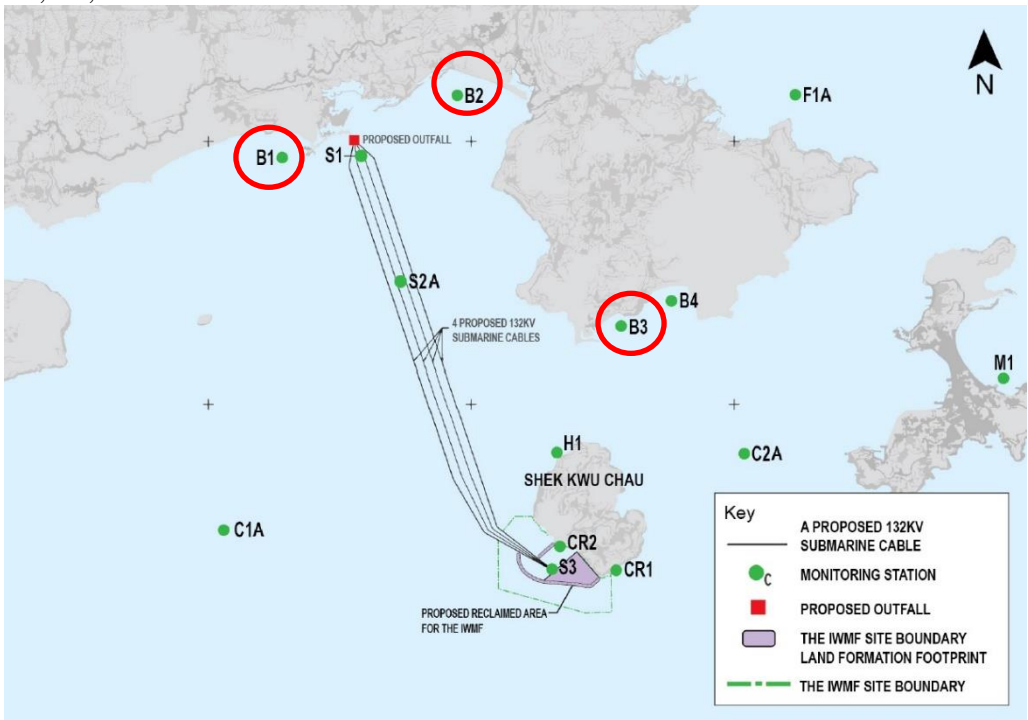
## Appendix N Exceedance Report

## Statistical Summary of Exceedances in the Reporting Period

Water Quality (Regular Monitoring)			
Location	Action Level	Limit Level	Total
B1	3	5	8
B2	3	7	10
B3	4	7	11
B4	3	5	8
CR1	4	6	10
CR2	3	7	10
F1A	3	3	6
H1	4	3	7
S1	0	0	0
S2A	0	0	0
S3	0	0	0
M1	2	4	6

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

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

Project	Integrated Waste Management Facilities, Phase 1		
Date	01 Dec 2021 (Lab result received on 8 Dec 2021)		
Time	08:00 – 11:25 (Mid-Ebb) 14:08 – 17:38 (Mid-Flood)		
Mid-Ebb			
Monitoring Location	B1, B2, B3 		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 11.8 mg/L (120% of C1A)		≥ 12.8 mg/L (130% of C1A)
Measurement Level	Impact Station(s) of Exceedance	Measurement Level	Impact Station(s) without Exceedance
	21.8 mg/L (B1) 21.0 mg/L (B2) 19.3 mg/L (B3)	9.8 mg/L (C1A) 10.0 mg/L (C2A)	9.5 mg/L (B4) 10.5 mg/L (F1) 9.0 mg/L (H1) 9.3 mg/L (M1) 8.7 mg/L (CR1) 9.8 mg/L (CR2)
Possible reason for Action or Limit Level Non-compliance	<p>Works undertaken on 1 December 2021 include 2.5 tonne armour weighing and dropping test, levelling of underlayer rock at BWA CH870 – 900, landfilling works for below +6.00mPD, landfill works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile, existing caisson extension and armour scour protection.</p> <p>Dominant sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>Exceedances of limit level were found at B1, B2 and B3. B1, B2 and B3 are located at unrelated stream direction (neither upstream nor downstream, far away) to the works location. Exceedances at these monitoring stations are deemed to be unrelated to the Project.</p>		



	<p>The installation of caisson No.19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and the weather was fine during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 01 Dec 2021.</p> <p>After the investigation, the exceedances on 01 Dec 2021 at B1, B2 and B3 are deemed to be unrelated to the Project.</p>
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Monitoring photos of  
stations with exceedance

B1:



B2:

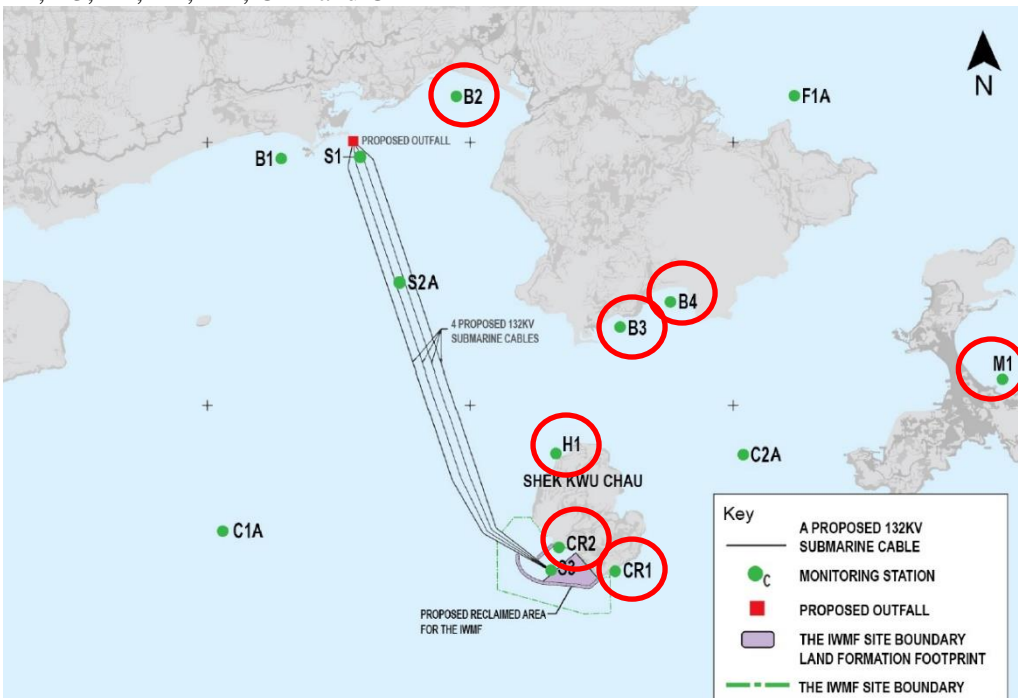


B3:





Mid-Flood

<p>Monitoring Location</p>			
<p>Parameter</p>	<p>Suspended Solid (SS)</p>		
<p>Action &amp; Limit Levels</p>	<p>Action Level  <math>\geq 8.0</math> mg/L</p>		<p>Limit Level  <math>\geq 10.0</math> mg/L</p>
<p>Measurement Level</p>	<p>Impact Station(s) of Exceedance</p> <p>8.8 mg/L (B2)              8.0 mg/L (B3)              8.8 mg/L (B4)              8.7 mg/L (H1)              17.7 mg/L (M1)              17.3 mg/L (CR1)              20.2 mg/L (CR2)</p>	<p>Control Stations</p> <p>9.0 mg/L (C1A)              6.3 mg/L (C2A)</p>	<p>Impact Station(s) without Exceedance</p> <p>7.8 mg/L (B1)              7.5 mg/L (F1A)</p>
<p>Possible reason for Action or Limit Level Non-compliance</p>	<p>Works scheduled on site on 01 Dec 2021 include leveling of underlayer rock at BWA CH870 – 900, installation of blockwork for marine access facility, landfilling works for below +6.00MPD, landfilling works for above +6.00MPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile and existing caisson extension and armour scour protection.</p> <p>Dominant sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>Exceedances of action level were found at B2, B3, B4, H1. Exceedances of limit level were found at M1, CR1 and CR2.</p> <p>B2, B3, B4 and M1 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>CR1 and CR2 are located close to the Project site and H1 is the downstream of the Project site during Flood tide while no marine work was conducted on 01 Dec 2021.</p>		

	<p>The installation of caisson No.19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and the weather was fine during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 01 Dec 2021.</p> <p>After the investigation, the exceedances on 01 Dec 2021 at B2, B3, B4, H1, M1, CR1 and CR2 are deemed to be unrelated to the Project.</p>
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Monitoring photos of  
stations with exceedance

B2:



B3:





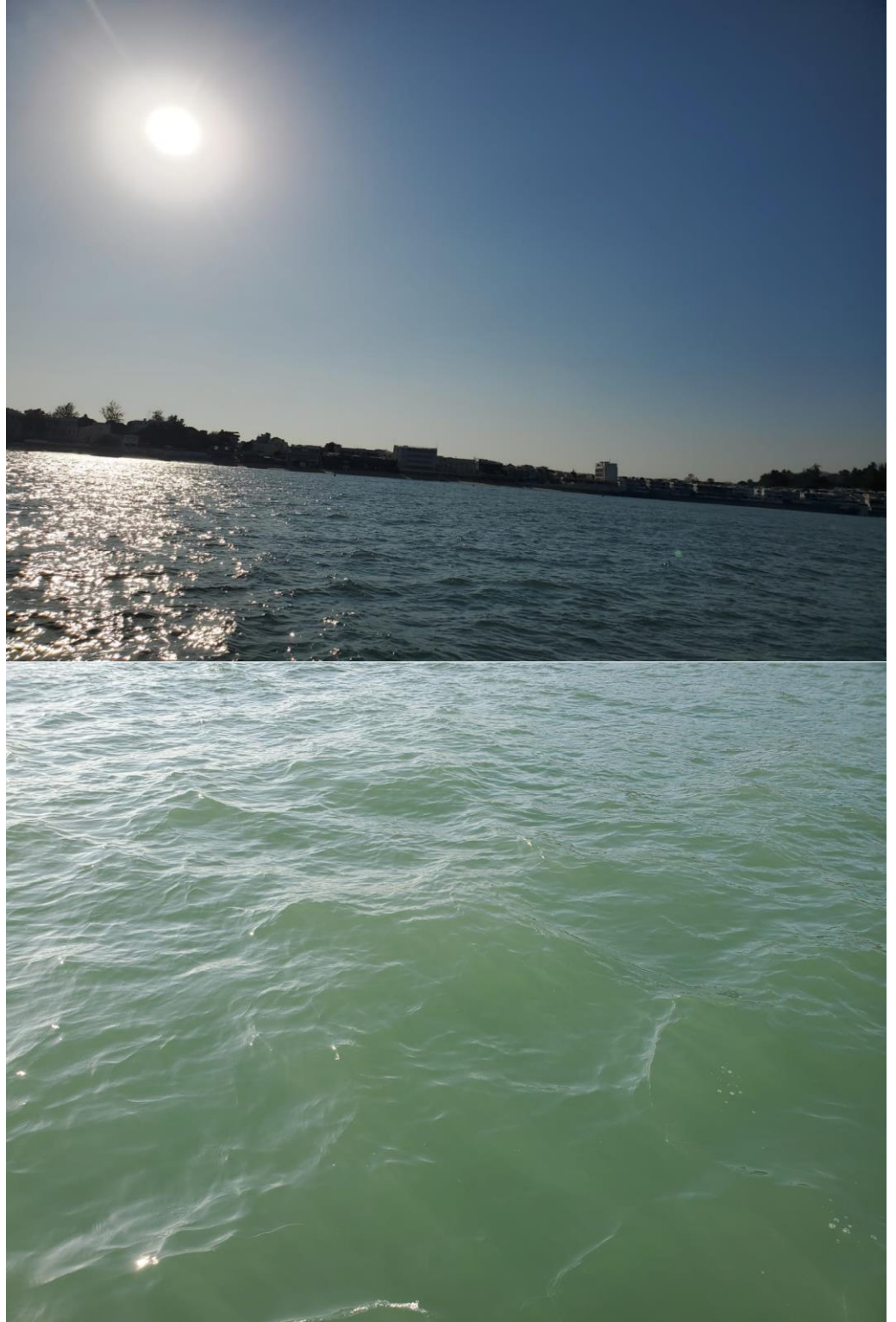
B4:



H1:



M1:





CR1:



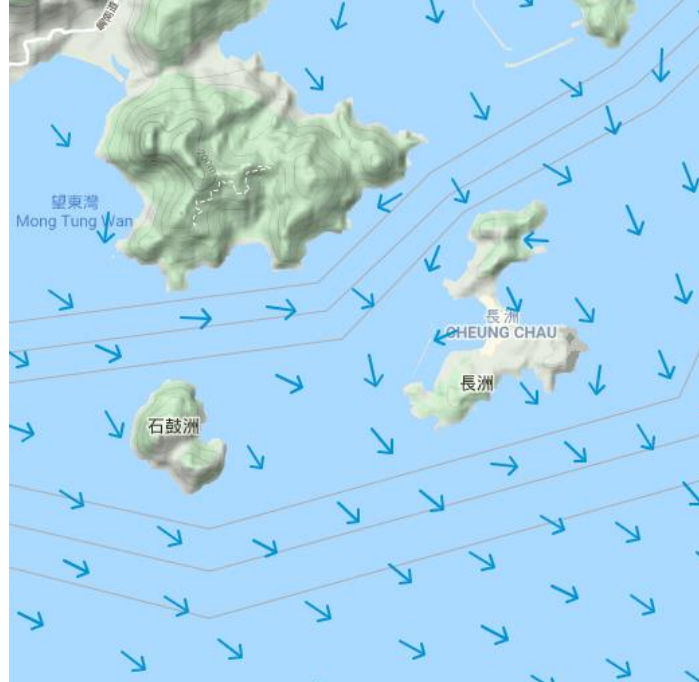
CR2:



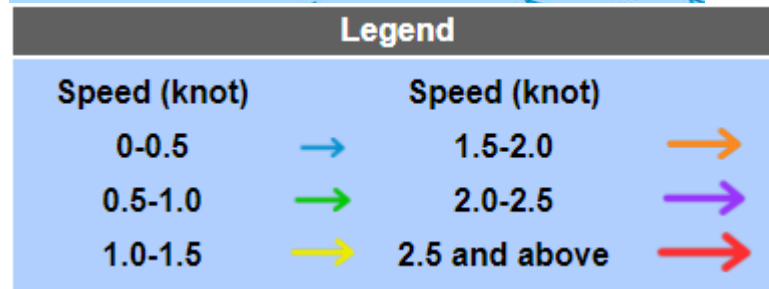
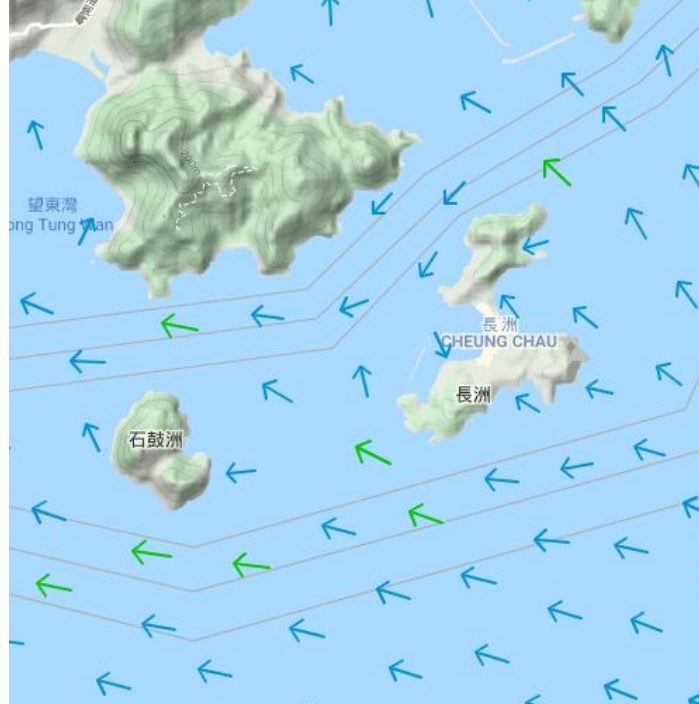


Remarks

Current direction during mid-ebb sampling on 01 Dec 2021:



Current direction during mid-flood sampling on 01 Dec 2021:



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

Prepared by	Jack Chow
Date	10 Jan 2022

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

Project	Integrated Waste Management Facilities, Phase 1		
Date	03 Dec 2021 (Lab result received on 10 Dec 2021)		
Time	09:47 – 13:17 (Mid-Ebb) 15:18 – 18:48 (Mid-Flood)		
Mid-Ebb			
Monitoring Location	F1A 		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Action & Limit Levels
	≥ 9.0 mg/L (120% of C1A)		≥ 10.0 mg/L
Measurement Level	Impact Station(s) of Exceedance	Measurement Level	Impact Station(s) of Exceedance
	9.2 mg/L (F1A)	7.5 mg/L (C1A) 9.2 mg/L (C2A)	7.5 mg/L (B1) 6.5 mg/L (B2) 5.8 mg/L (B3) 6.5 mg/L (B4) 6.0 mg/L (H1) 7.0 mg/L (M1) 6.7 mg/L (CR1) 6.2 mg/L (CR2)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 03 Dec 2021 include Leveling of underlayer rock at BWA CH870 – 900, installation of blockwork for marine access facility, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile and existing caisson extension and armour scour protection.</p> <p>Dominant sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>An exceedance of action level was found at F1A.</p>		

	<p>F1A was located at unrelated stream direction (neither upstream nor downstream, far away) to the works location, the exceedance at this monitoring station is deemed to be unrelated to the Project.</p> <p>The installation of caisson No.19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and the weather was fine during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 07 Dec 2021.</p> <p>After the investigation, the exceedance on 03 Dec 2021 at F1A is deemed to be unrelated to the Project.</p>
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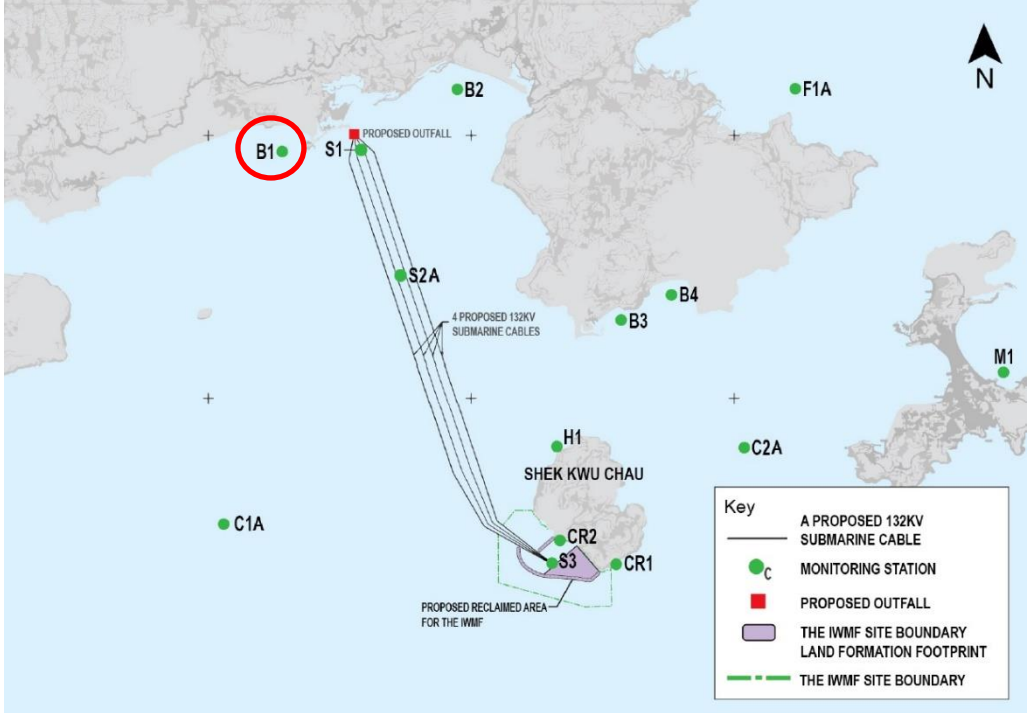



Monitoring photos of  
stations with exceedance

F1A:



Mid-Flood

<p>Monitoring Location</p>			
<p>Parameter</p>	<p>Suspended Solid (SS)</p>		
<p>Action &amp; Limit Levels</p>	<p>Action Level  <math>\geq 8.0</math> mg/L</p>		<p>Limit Level  <math>\geq 10.0</math> mg/L</p>
<p>Measurement Level</p>	<p>Impact Station(s) of Exceedance              8.0 mg/L (B1)</p>	<p>Control Stations              5.0 mg/L (C1A)              5.8 mg/L (C2A)</p>	<p>Impact Station(s) without Exceedance              7.3 mg/L (B2)              7.8 mg/L (B3)              7.5 mg/L (B4)              6.0 mg/L (F1A)              6.8 mg/L (H1)              6.2 mg/L (M1)              6.8 mg/L (CR1)              6.7 mg/L (CR2)</p>
<p>Possible reason for Action or Limit Level Non-compliance</p>	<p>Works scheduled on site on 03 Dec 2021 include Leveling of underlayer rock at BWA CH870 – 900, installation of blockwork for marine access facility, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile and existing caisson extension and armour scour protection.</p> <p>Dominant sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>An exceedance of action level was found at B1.</p> <p>B1 is located at unrelated stream direction (neither upstream nor downstream, far away) to the works location. The exceedance at this monitoring station is deemed to be unrelated to the Project.</p> <p>The installation of caisson No.19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p>		

	<p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and the weather was fine during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 07 Dec 2021.</p> <p>After the investigation, the exceedance on 03 Dec 2021 at B1 is deemed to be unrelated to the Project.</p>
<p>Monitoring photos of stations with exceedance</p>	<p>B1:</p> 

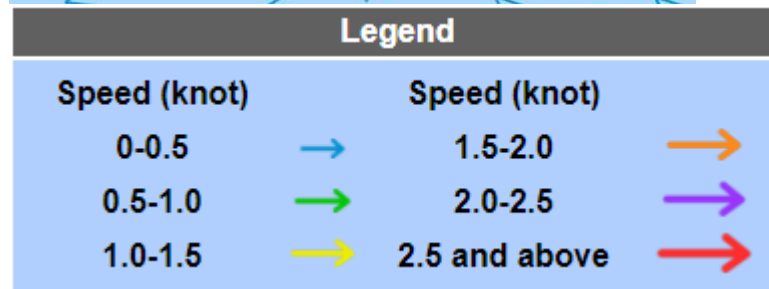


Remarks

Current direction during mid-ebb sampling on 03 Dec 2021:



Current direction during mid-flood sampling on 03 Dec 2021:



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

Prepared by	Jack Chow
Date	07 Jan 2022

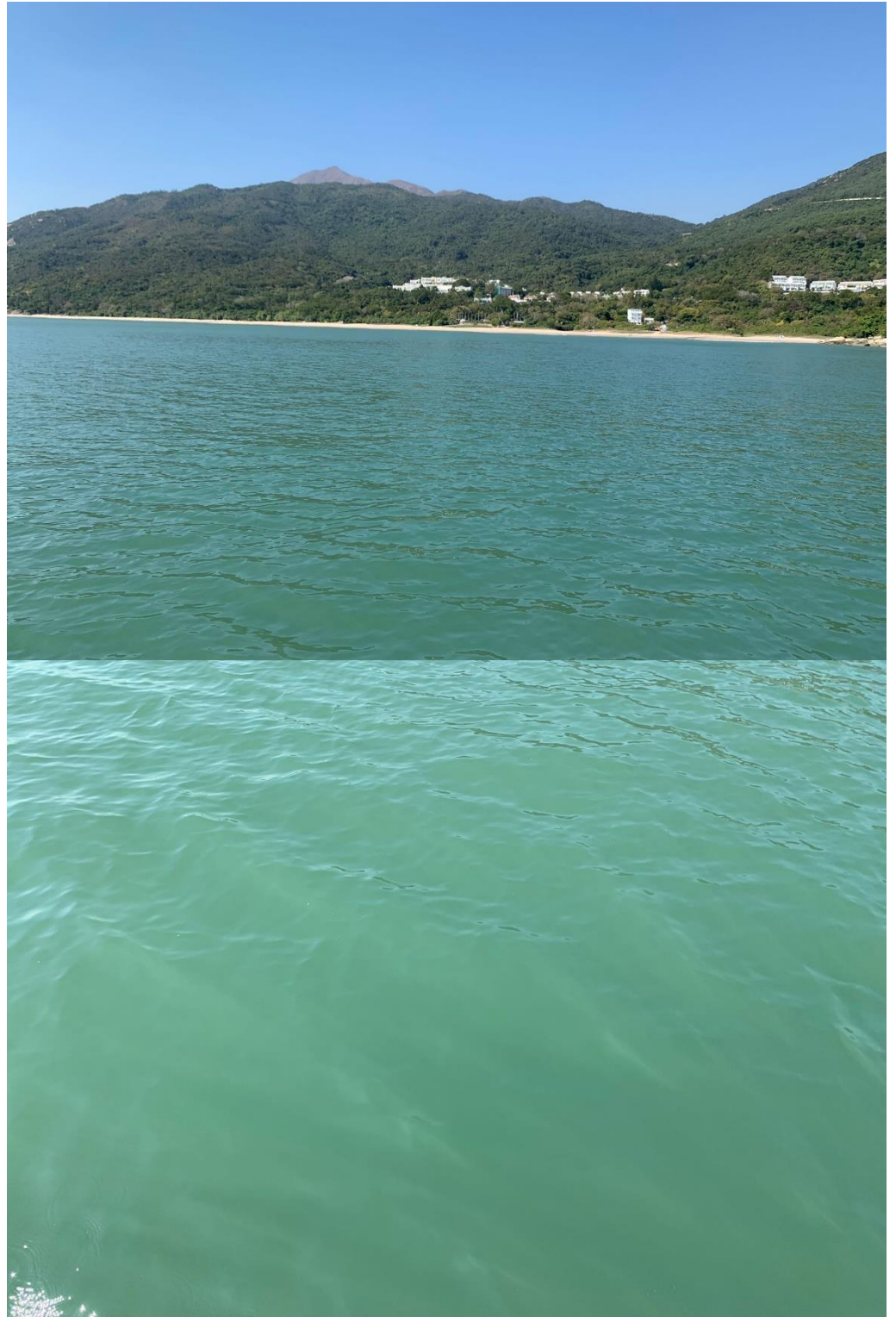
**Incident Report on Action Level or Limit Level Non-compliance**

Project	Integrated Waste Management Facilities, Phase 1		
Date	06 Dec 2021 (Lab result received on 13 Dec 2021)		
Time	12:22 – 15:52 (Mid-Ebb)		
Monitoring Location	Mid-Ebb B1, B3, B4, M1, CR1, CR2		
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
	9.8 mg/L (B1) 9.0 mg/L (B3) 11.5 mg/L (B4) 8.5 mg/L (M1) 8.7 mg/L (CR1) 8.5 mg/L (CR2)	5.2 mg/L (C1A) 5.0 mg/L (C2A)	7.0 mg/L (B2) 5.2 mg/L (F1) 6.8 mg/L (H1)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 06 Dec 2021 include Laying 1 T armour rock at Seawall A, installation of blockwork for marine access facility, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile and existing caisson extension and armour scour protection.</p> <p>Dominating sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>Exceedances of action level were found at B1, B3, M1, CR1 and CR2. Exceedances of limit level was found at B4.</p> <p>B1, B3, B4 and M1 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>CR1 and CR2 are located close to the works location within the Project site while no marine work was conducted on 06 Dec 2021.</p> <p>The installation of caisson No.19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and the weather was fine during the sampling event.</p> <p>No major observation of improper site practices that could contribute to the increase of the suspended solids was recorded during the weekly inspection on 01 and 07 Dec 2021.</p> <p>After the investigation, the exceedances on 06 Dec 2021 at B1, B3, B4, M1, CR1 and CR2 are deemed to be unrelated to the Project.</p>
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Monitoring photos of  
stations with exceedance

B1:





B3:

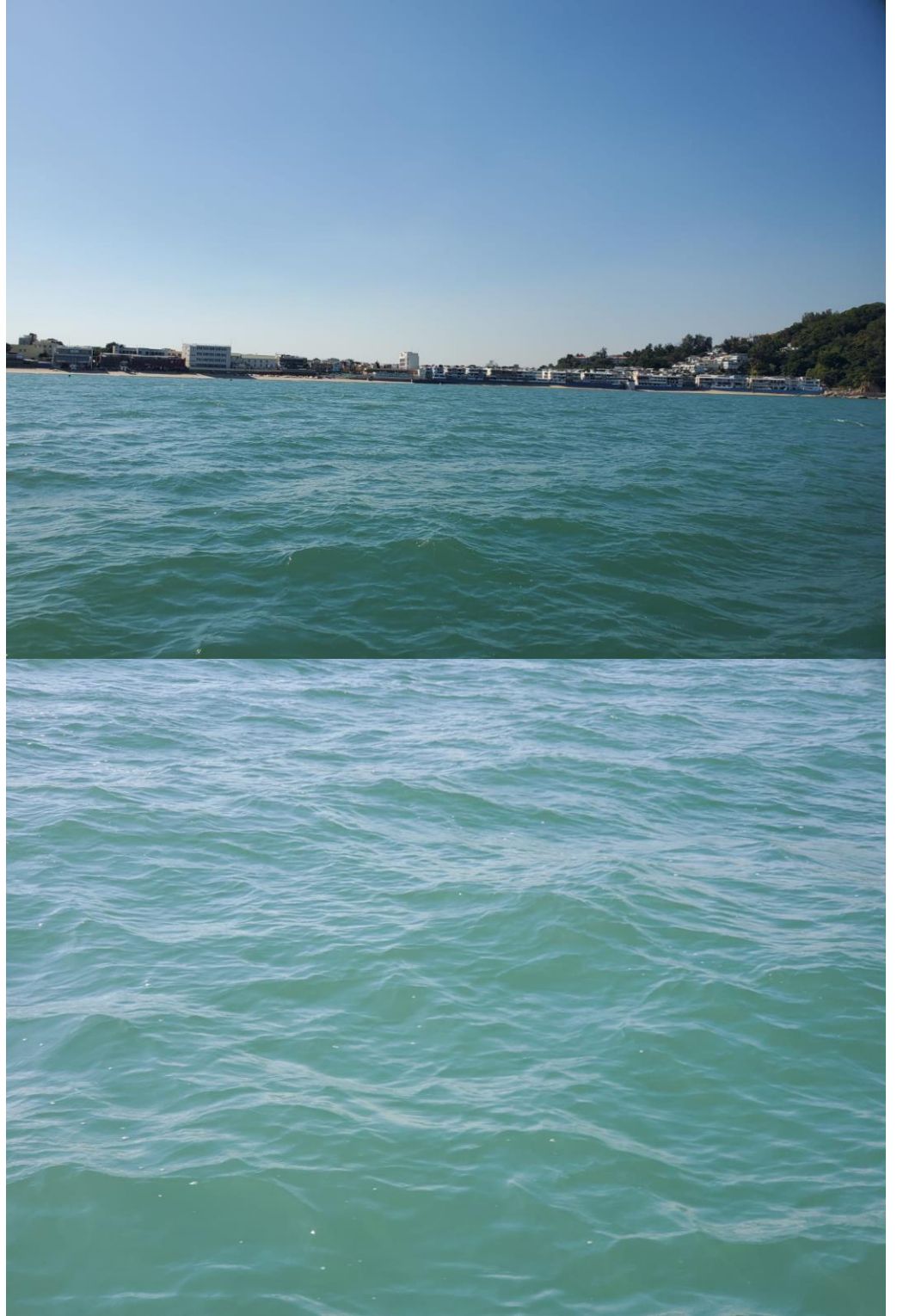




B4:

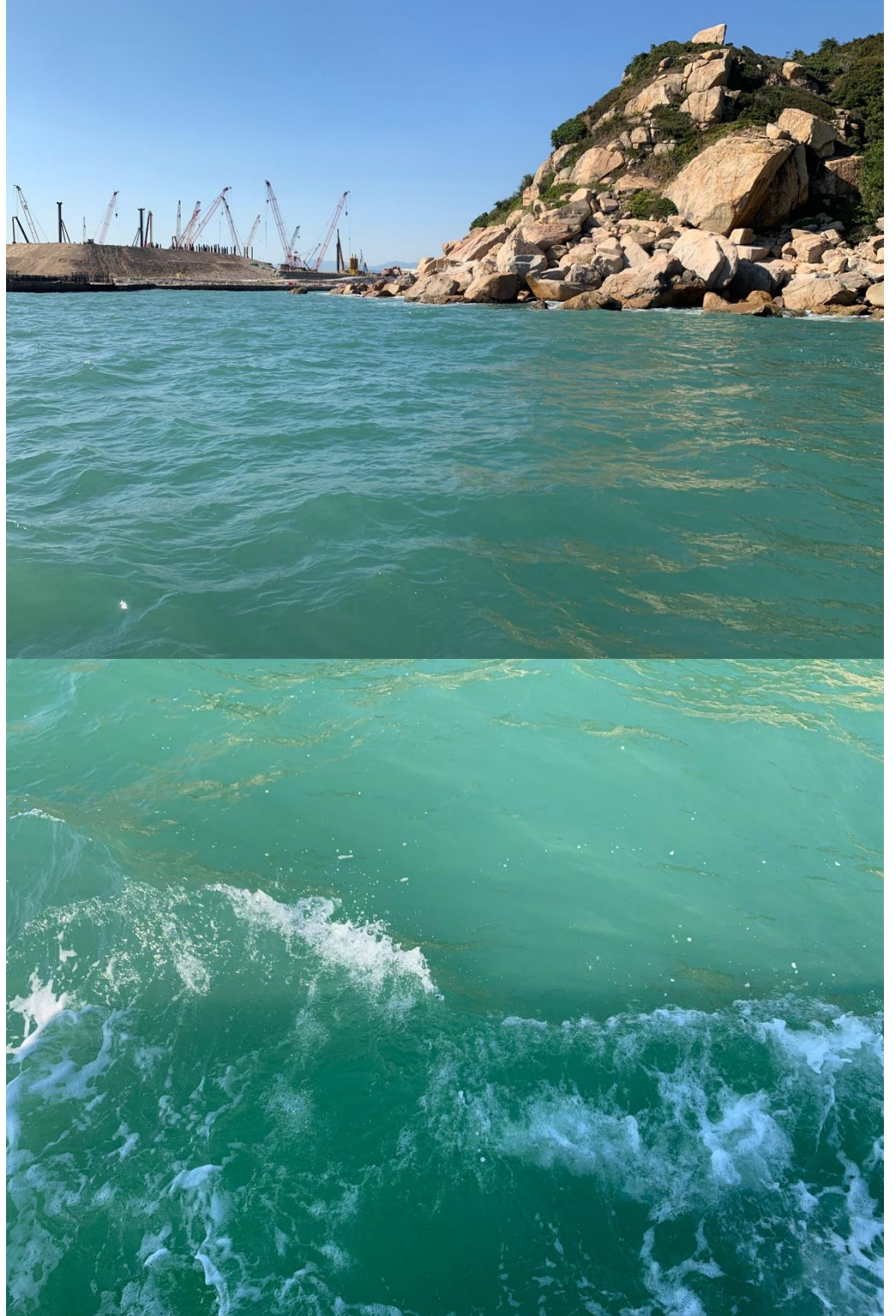


M1:





CR1:



CR2:





Remarks

Current direction during mid-ebb sampling on 06 Dec 2021:



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	Jack Chow
Date	10 Jan 2022

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

Project	Integrated Waste Management Facilities, Phase 1		
Date	08 Dec 2021 (Lab result received on 15 Dec 2021)		
Time	14:18 – 16:54 (Mid-Ebb) 08:50 – 12:20 (Mid-Flood)		
Mid-Ebb			
Monitoring Location	B1, B2, B3, B4, M1, CR1 and CR2		
	<p>The map displays the Shek Kwu Chau area with various monitoring stations marked by green dots. Stations B1, B2, B3, B4, M1, CR1, and CR2 are circled in red, indicating non-compliance. Other stations include C1A, C2A, F1A, S1, S2A, S3, and H1. A red square marks the proposed outfall. Four lines represent the proposed 132KV submarine cables. A purple shaded area indicates the IWMF site boundary, and a green dashed line shows the land formation footprint. A key in the bottom right corner defines these symbols.</p>		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Action & Limit Levels
	≥ 11.2 mg/L (120% of C1A)		≥ 12.1 mg/L (130% of C1A)
Measurement Level	Impact Station(s) of Exceedance	Measurement Level	Impact Station(s) without Exceedance
	15.5 mg/L (B1) 13.8 mg/L (B2) 15.8 mg/L (B3) 14.0 mg/L (B4) 22.2 mg/L (M1) 12.5 mg/L (CR1) 24.2 mg/L (CR2)	9.3 mg/L (C1A) 10.2 mg/L (C2A)	9.8 mg/L (F1) 11.0 mg/L (H1)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 08 Dec 2021 include leveling of 500kg armour rock at Breakwater B CH60 - CH150, leveling of underlayer rock at BWA CH900 - CH930, installation of blockwork for marine access facility, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile and existing caisson extension and armour scour protection.</p> <p>Dominant sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>Exceedances of limit level were found at B1, B2, B3, B4, M1, CR1 and CR2.</p>		

	<p>B1, B2, B3, B4 and M1 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>CR2 is located within the Project site while no marine work was conducted on 08 Dec 2021.</p> <p>The installation of caisson No.19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and the weather was fine during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids was recorded during the weekly inspection on 14 Dec 2021.</p> <p>After the investigation, the exceedances on 08 Dec 2021 at B1, B2, B3, B4, M1, CR1 and CR2 are deemed to be unrelated to the Project.</p>
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Monitoring photos of  
stations with exceedance

B1:





B2:



B3:





B4:

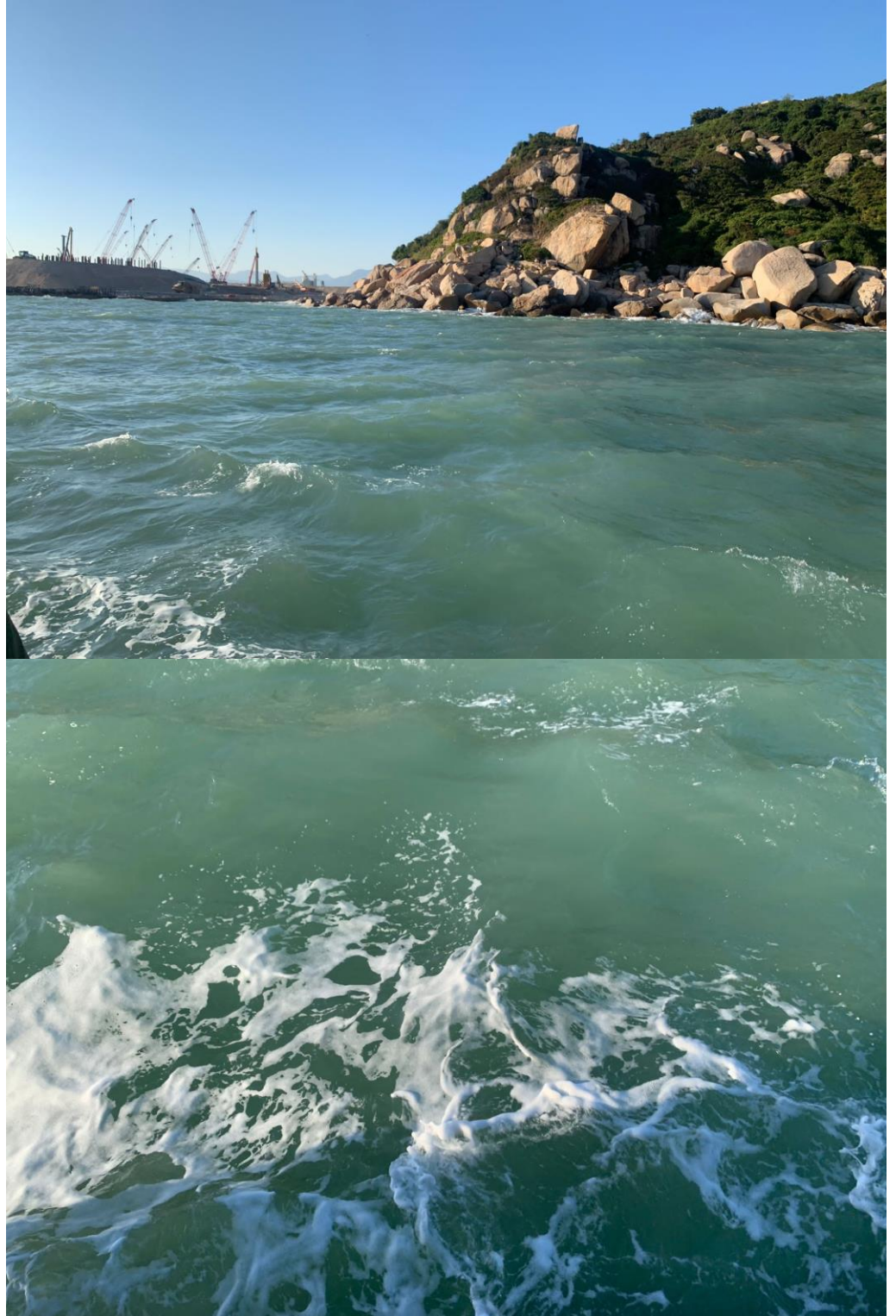


M1:



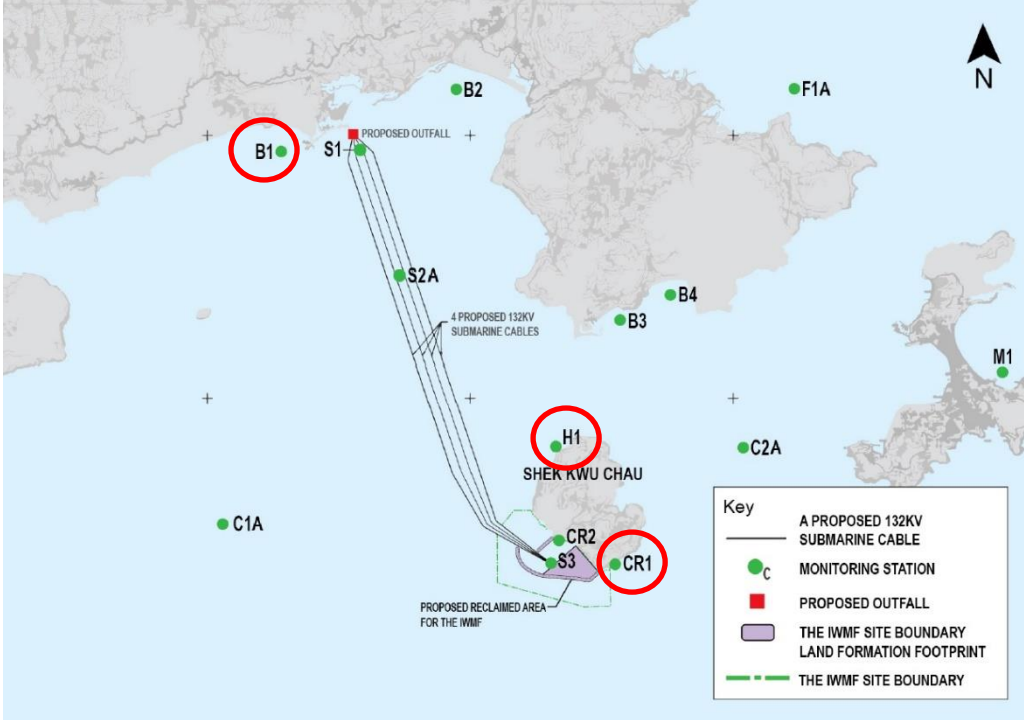


CR1:



CR2:



Mid-Flood			
Monitoring Location	B1, H1 and CR1 		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 15.2 mg/L (120% of C2A)		≥ 16.5 mg/L (130% of C2A)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	16.0 mg/L (B1) 20.0 mg/L (H1) 19.7 mg/L (CR1)	13.2 mg/L (C1A) 12.7 mg/L (C2A)	10.5 mg/L (B2) 14.3 mg/L (B3) 9.8 mg/L (B4) 12.0 mg/L (CR2) 12.3 mg/L (M1) 12.3 mg/L (F1A)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 08 Dec 2021 include leveling of 500kg armour rock at Breakwater B CH60 - CH150, leveling of underlayer rock at BWA CH900 - CH930, installation of blockwork for marine access facility, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile and existing caisson extension and armour scour protection.</p> <p>Dominant sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>Exceedances of action level was found at B1 and exceedances of limit level were found at H1 and CR1.</p> <p>B1 is located far away from the works location and H1 and CR1 are located at unrelated stream direction. No marine work was conducted on site on 8 Dec 2021.</p> <p>The installation of caisson No.19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p>		

	<p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and the weather was fine during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids was recorded during the weekly inspection on 14 Dec 2021.</p> <p>After the investigation, the exceedances on 08 Dec 2021 at B1, H1 and CR1 are deemed to be unrelated to the Project.</p>
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Monitoring photos of  
stations with exceedance

B1:



H1:





CR1:

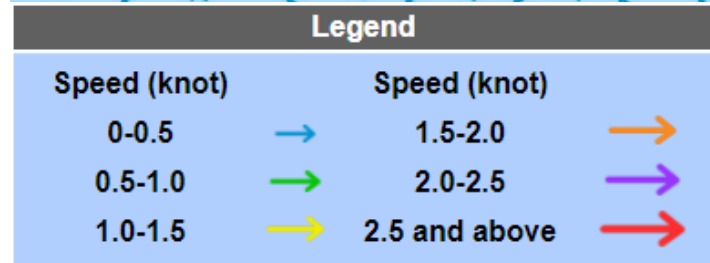
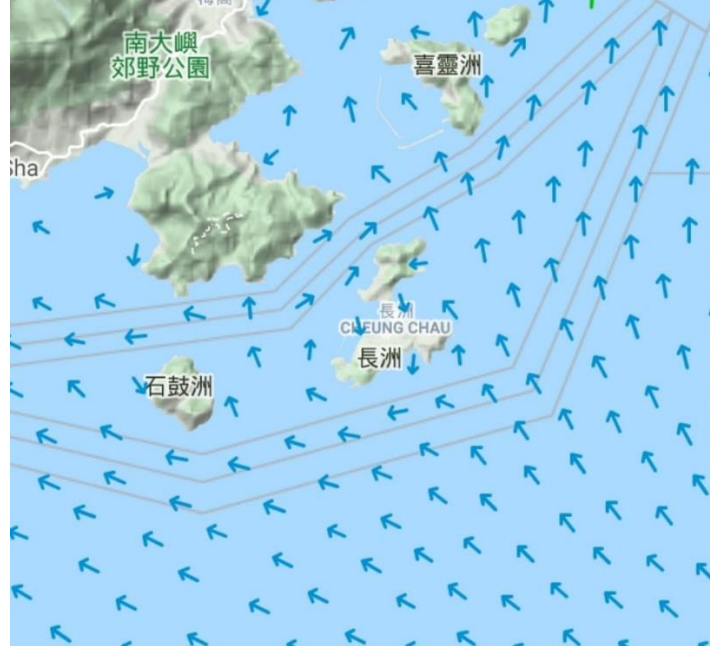


Remarks

Current direction during mid-ebb sampling on 08 Dec 2021:



Current direction during mid-flood sampling on 08 Dec 2021:



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

Prepared by Jack Chow

Date 10 Jan 2022



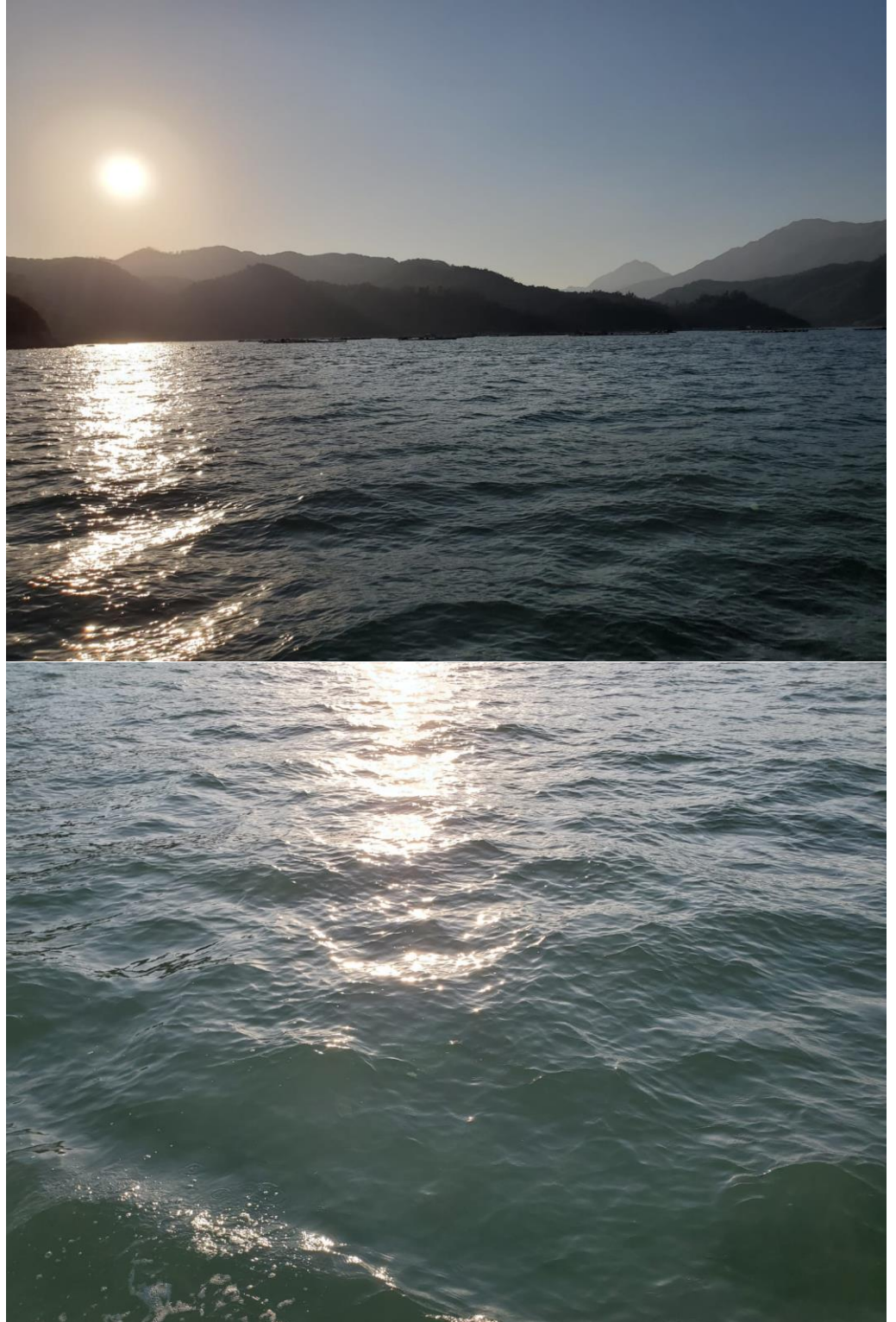
**Incident Report on Action Level or Limit Level Non-compliance**

Project	Integrated Waste Management Facilities, Phase 1		
Date	10 Dec 2021 (Lab result received on 16 Dec 2021)		
Time	15:45 – 19:00 (Mid-Ebb)		
Monitoring Location	Mid-Ebb F1A, CR1		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 11.2 mg/L (C1A of 120%)		≥ 12.1 mg/L (C1A of 130%)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	12.2 mg/L (F1A) 11.2 mg/L (CR1)	9.3 mg/L (C1A) 11.0 mg/L (C2A)	9.8 mg/L (B1) 7.0 mg/L (B2) 8.0 mg/L (B3) 7.5 mg/L (B4) 8.8 mg/L (H1) 5.5 mg/L (M1) 5.5 mg/L (CR2)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 10 Dec 2021 include leveling of 500kg armour rock at Breakwater B CH60 - CH150, laying of 900kg armour rock at Seawall A CH320 - CH440, installation of Caisson 49K1, installation of blockwork for marine access facility, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile, existing caisson extension and armour scour protection.</p> <p>Dominant sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p>		

	<p>An exceedance of action level was found at CR1 and an exceedance of limit level was found at F1A.</p> <p>F1A is located at unrelated stream direction (neither upstream nor downstream, far away) to the works location. The exceedance at this monitoring station is deemed to be unrelated to the Project.</p> <p>CR1 is located within the Project site while no marine work was conducted on 10 Dec 2021.</p> <p>The installation of caisson No.19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and the weather was fine during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 14 Dec 2021.</p> <p>After the investigation, the exceedances on 10 Dec 2021 at F1A and CR1 are deemed to be unrelated to the Project.</p>
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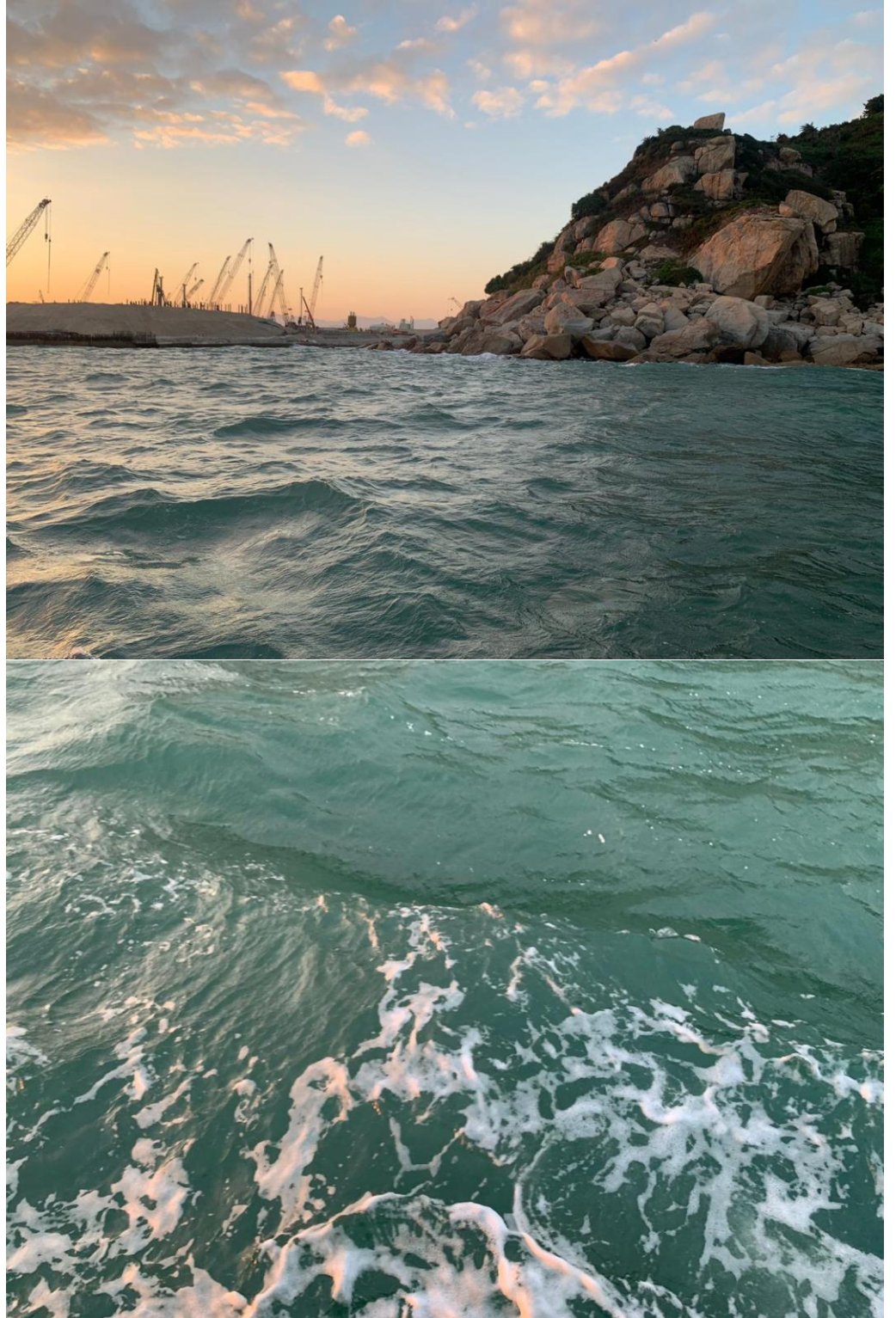
Monitoring photos of  
stations with exceedance

F1A:





CR1:



Remarks

Current direction during mid-ebb sampling on 10 Dec 2021:



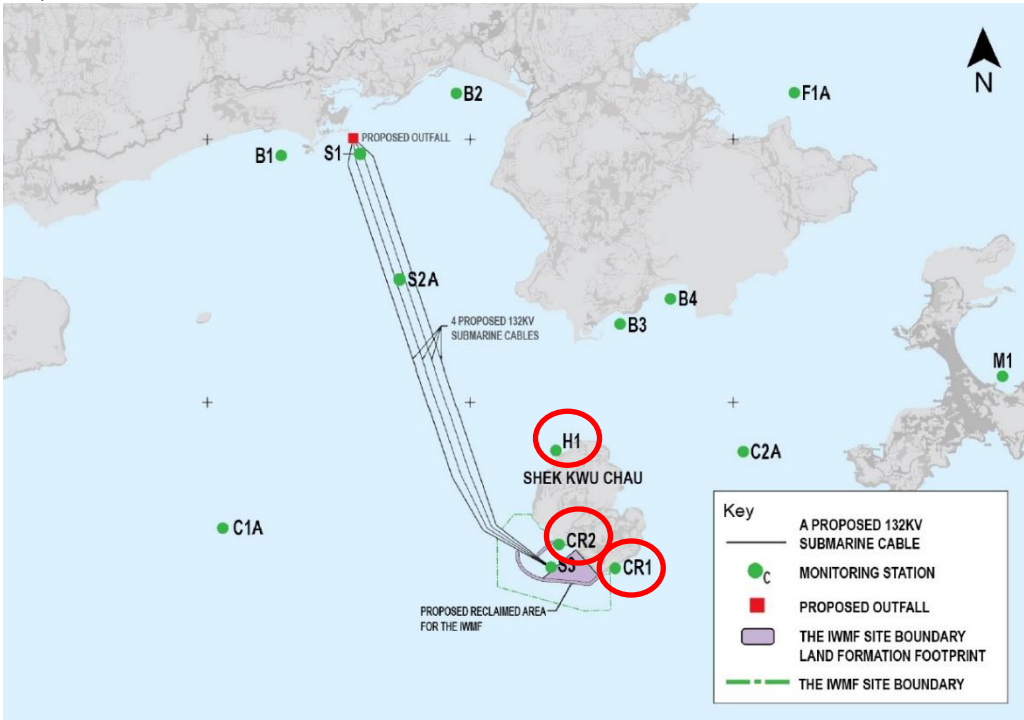
Legend			
Speed (knot)		Speed (knot)	
0-0.5		1.5-2.0	
0.5-1.0		2.0-2.5	
1.0-1.5		2.5 and above	

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

Prepared by Jack Chow

Date 07 Jan 2022

Incident Report on Action Level or Limit Level Non-compliance

Project	Integrated Waste Management Facilities, Phase 1		
Date	10 Dec 2021		
Time	10:34 – 14:04 (Mid-Flood)		
Mid-Flood			
Monitoring Location	H1, CR1 and CR2 		
Parameter	Dissolved oxygen (DO)		
Action & Limit Levels	Action Level		Limit Level
	≤ 7.13 mg/L		≤ 4 mg/L
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	6.29 mg/L (H1) 6.45 mg/L (CR1) 6.22 mg/L (CR2)	7.59 mg/L (C1A) 6.61 mg/L (C2A)	8.24 mg/L (B1) 8.12 mg/L (B2) 8.03 mg/L (B3) 8.15 mg/L (B4) 7.49 mg/L (F1A) 7.45 mg/L (M1)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 10 Dec 2021 include leveling of 500kg armour rock at Breakwater B CH60 - CH150, laying of 900kg armour rock at Seawall A CH320 - CH440, installation of Caisson 49K1, installation of blockwork for marine access facility, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile, existing caisson extension and armour scour protection.</p> <p>Dominant sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>Exceedances of Action level were found at H1, CR1 and CR2.</p> <p>CR1 and CR2 is located within the Project site and H1 is the downstream of the Project site during Flood tide while no marine work was conducted on 10 Dec 2021.</p>		

	<p>The installation of caisson No.19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume or stain of chemical spillage was observed in the Project site and the weather was fine during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the chemical oxygen demand (COD) were recorded during the weekly inspection on 14 Dec 2021.</p> <p>The exceedances of Action level at location H1, CR1 and CR2 were possibly caused by the natural fluctuation in DO level. With reference to the water quality monitoring data documented in Annual Marine Water Quality Report of 2020 (<a href="https://www.epd.gov.hk/epd/sites/default/files/epd/english/environmentinhk/water/hk_wqrc/files/waterquality/annual-report/marinereport2020.pdf">https://www.epd.gov.hk/epd/sites/default/files/epd/english/environmentinhk/water/hk_wqrc/files/waterquality/annual-report/marinereport2020.pdf</a>) issued by EPD, the DO level of three monitoring stations (i.e. SM11, SM12 and SM13) that were adjacent to the Project site was ranged from 4.2mg/L to 8.6mg/L. The measured DO levels at monitoring stations H1, CR1 and CR2 were within the range of DO level recorded by the EPD.</p> <p>After the investigation, the exceedances on 10 Dec 2021 at H1, CR1 and CR2 are deemed to be unrelated to the Project.</p>
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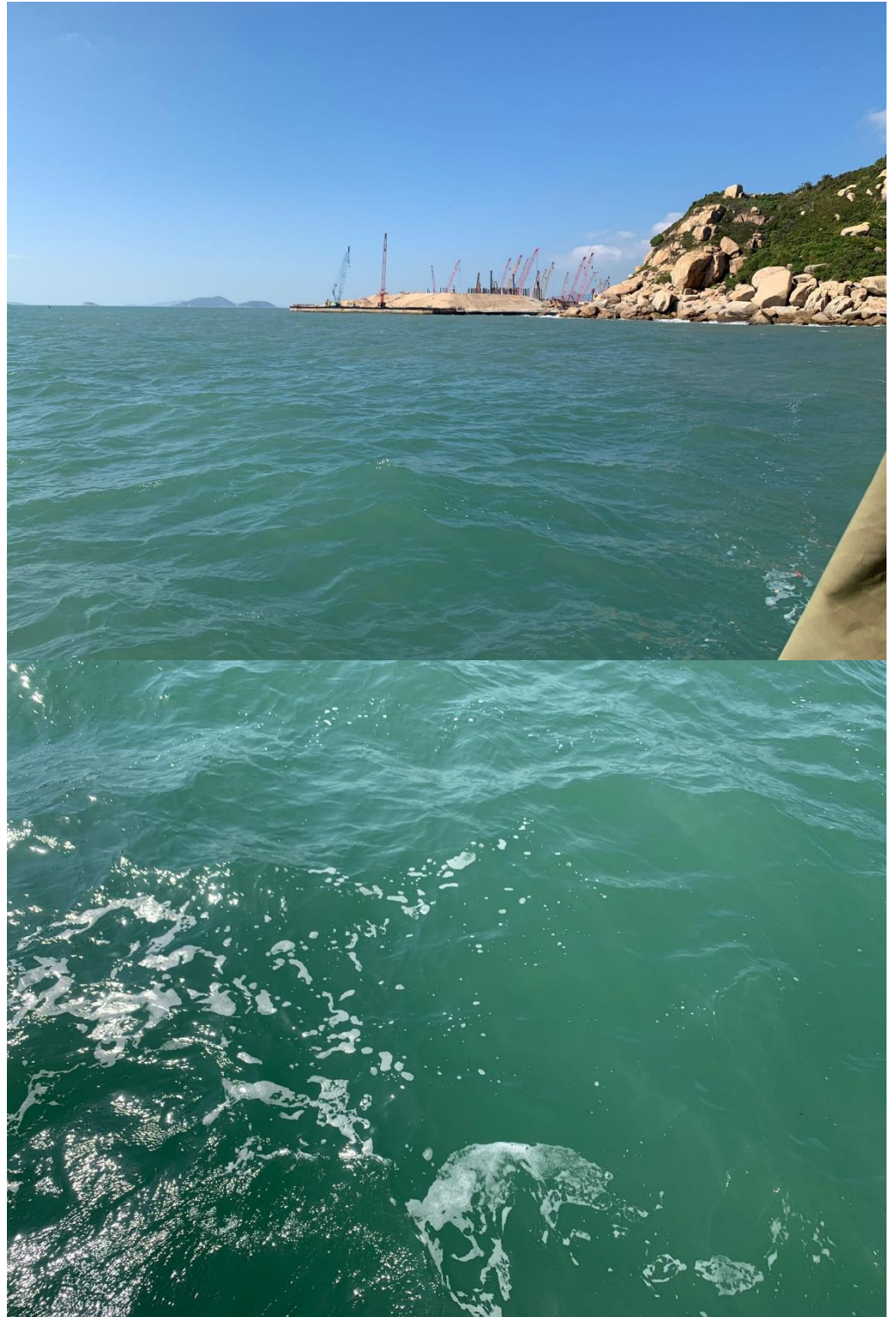


Monitoring photos of  
stations with exceedance

H1:



CR1:



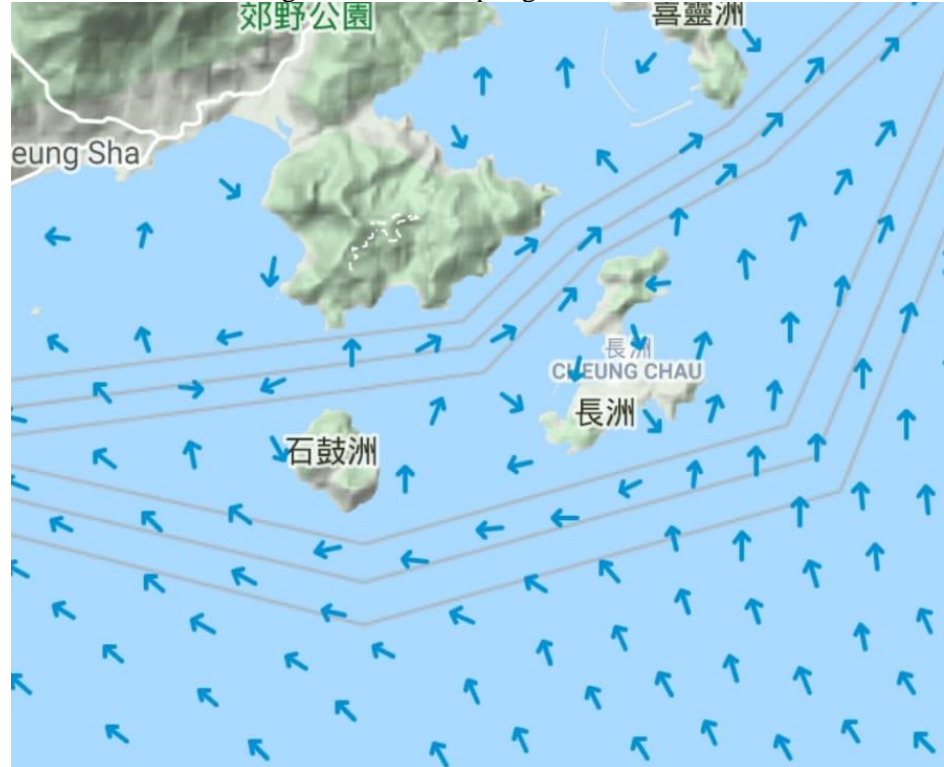


CR2:



Remarks

Current direction during mid-flood sampling on 10 Dec 2021:

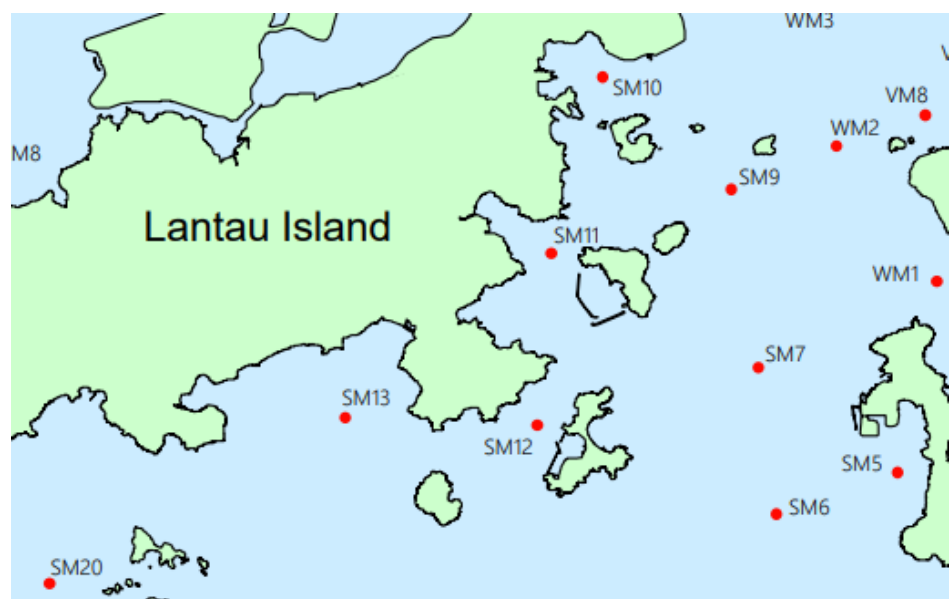


**Legend**

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>)

Screen grab of monitoring locations of EPD marine water quality monitoring in 2020:



([https://www.epd.gov.hk/epd/sites/default/files/epd/english/environmentinhk/water/hk\\_wqrc/files/waterquality/annual-report/marinereport2020.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/environmentinhk/water/hk_wqrc/files/waterquality/annual-report/marinereport2020.pdf))



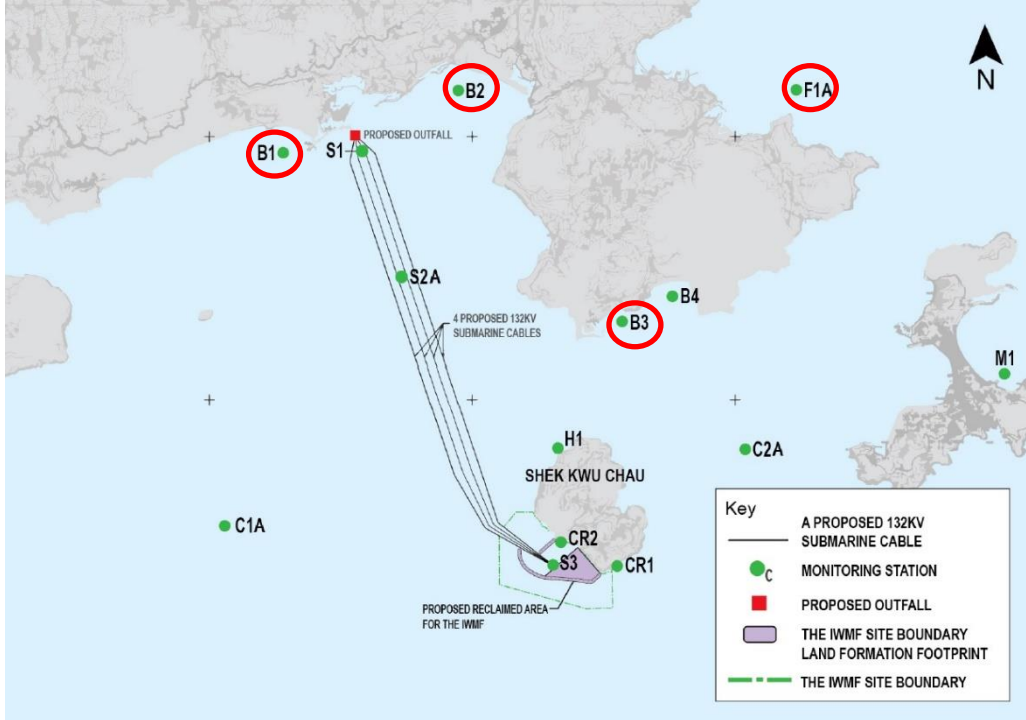
Screen grab of monitoring data of EPD marine water quality monitoring in 2020:

Summary of water quality statistics for the Southern WCZ in 2020 (continued)					
Parameter	Lantau Island (East)			Lantau Island (South)	
	SM10	SM11	SM12	SM13	SM17
<b>Number of samples</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>
Temperature (°C)	25.8 (20.6 - 29.3)	25.8 (20.8 - 29.0)	25.6 (20.6 - 29.0)	25.9 (20.5 - 29.2)	25.1 (20.1 - 29.0)
Salinity	29.4 (24.8 - 33.1)	29.9 (25.8 - 33.1)	30.1 (25.2 - 33.1)	29.5 (22.6 - 33.3)	31.1 (26.9 - 33.0)
Dissolved Oxygen (mg/L)	6.0 (4.8 - 6.8)	6.4 (4.2 - 8.4)	6.4 (4.7 - 8.1)	6.5 (5.4 - 8.6)	5.9 (5.0 - 6.5)
Bottom	6.0 (4.5 - 6.8)	6.4 (3.8 - 8.7)	6.3 (4.4 - 8.0)	6.6 (5.3 - 9.1)	5.8 (4.2 - 7.3)

([https://www.epd.gov.hk/epd/sites/default/files/epd/english/environmentinhk/water/hk\\_wqrc/files/waterquality/annual-report/marinereport2020.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/environmentinhk/water/hk_wqrc/files/waterquality/annual-report/marinereport2020.pdf))

Prepared by	Joe Ho
Date	11 Jan 2022

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

Project	Integrated Waste Management Facilities, Phase 1		
Date	15 Dec 2021 (Lab result received on 21 Dec 2021)		
Time	08:07 – 11:37 (Mid-Ebb)		
Mid-Ebb			
Monitoring Location	B1, B2, B3 and F1A 		
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
	14.0 mg/L (B1) 11.8 mg/L (B2) 11.0 mg/L (B3) 16.0 mg/L (F1A)	7.7 mg/L (C1A) 6.5 mg/L (C2A)	6.8 mg/L (B4) 7.8 mg/L (H1) 8.7 mg/L (M1) 8.7 mg/L (CR1) 8.5 mg/L (CR2)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 15 Dec 2021 include infilling of G200 rock at Caisson 49K1; laying of 900kg armour rock at Seawall A (CH320 - CH440; CH660 - CH670); leveling of underlayer rock at BWA CH920 – 950, installation of blockwork for marine access facility, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile and existing caisson extension and armour scour protection.</p> <p>Dominant sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>Exceedances of limit level were found at B1, B2, B3 and F1A.</p> <p>B1, B2, B3 and F1A are located at unrelated stream direction (neither upstream nor downstream, far away) to the works location. The exceedances at these monitoring stations are deemed to be unrelated to the Project.</p>		

	<p>The installation of caisson No.19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and the weather was fine cloudy during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 23 Dec 2021.</p> <p>After the investigation, the exceedances on 15 Dec 2021 at B1, B2, B3 and F1A are deemed to be unrelated to the Project.</p>
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Monitoring photos of  
stations with exceedance

B1:



B2:





B3:





F1A:



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Remarks

Current direction during mid-ebb sampling on 15 Dec 2021:



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	Jack Chow
Date	10 Jan 2022



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

Project	Integrated Waste Management Facilities, Phase 1		
Date	17 Dec 2021 (Lab result received on 22 Dec 2021)		
Time	09:31 – 13:01 (Mid-Ebb) 14:50 – 18:20 (Mid-Flood)		
Mid-Ebb			
Monitoring Location	B2, B3, B4, H1, M1, CR1 and CR2		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Action & Limit Levels
	≥ 9.8 mg/L (120% of C1A)		≥ 10.7 mg/L (120% of C1A)
Measurement Level	Impact Station(s) of Exceedance	Measurement Level	Impact Station(s) without Exceedance
	10.8 mg/L (B2) 10.0 mg/L (B3) 10.3 mg/L (B4) 10.0 mg/L (H1) 14.3 mg/L (M1) 14.3 mg/L (CR1) 24.3 mg/L (CR2)	8.2 mg/L (C1A) 11.0 mg/L (C2A)	9.0 mg/L (B1) 9.2 mg/L (F1A)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 17 Dec 2021 include laying of 1T armour rock at Seawall A CH300 - CH350, laying of 900kg armour rock at Seawall A CH350 - CH440, leveling of underlayer rock at BWA CH920 - 950, installation of blockwork for marine access facility, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile, existing caisson extension and armour scour protection.</p> <p>Dominant sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>Exceedances of action level were found at B3, B4 and H1. Exceedances of limit level were found at B2, M1, CR1 and CR2.</p>		

	<p>B2, B3, B4, H1 and M1 are located at unrelated stream direction (neither upstream nor downstream, far away) to the works location. Exceedances at these monitoring stations are deemed to be unrelated to the Project.</p> <p>CR1 and CR2 are located close to the Project site while no marine work was conducted on 17 Dec 2021.</p> <p>The installation of caisson No.19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and the weather was cloudy during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 23 Dec 2021.</p> <p>After the investigation, the exceedances on 17 Dec 2021 at B2, B3, B4, H1, M1, CR1 and CR2 are deemed to be unrelated to the Project.</p>
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Monitoring photos of  
stations with exceedance

B2:





B3:



B4:





H1:

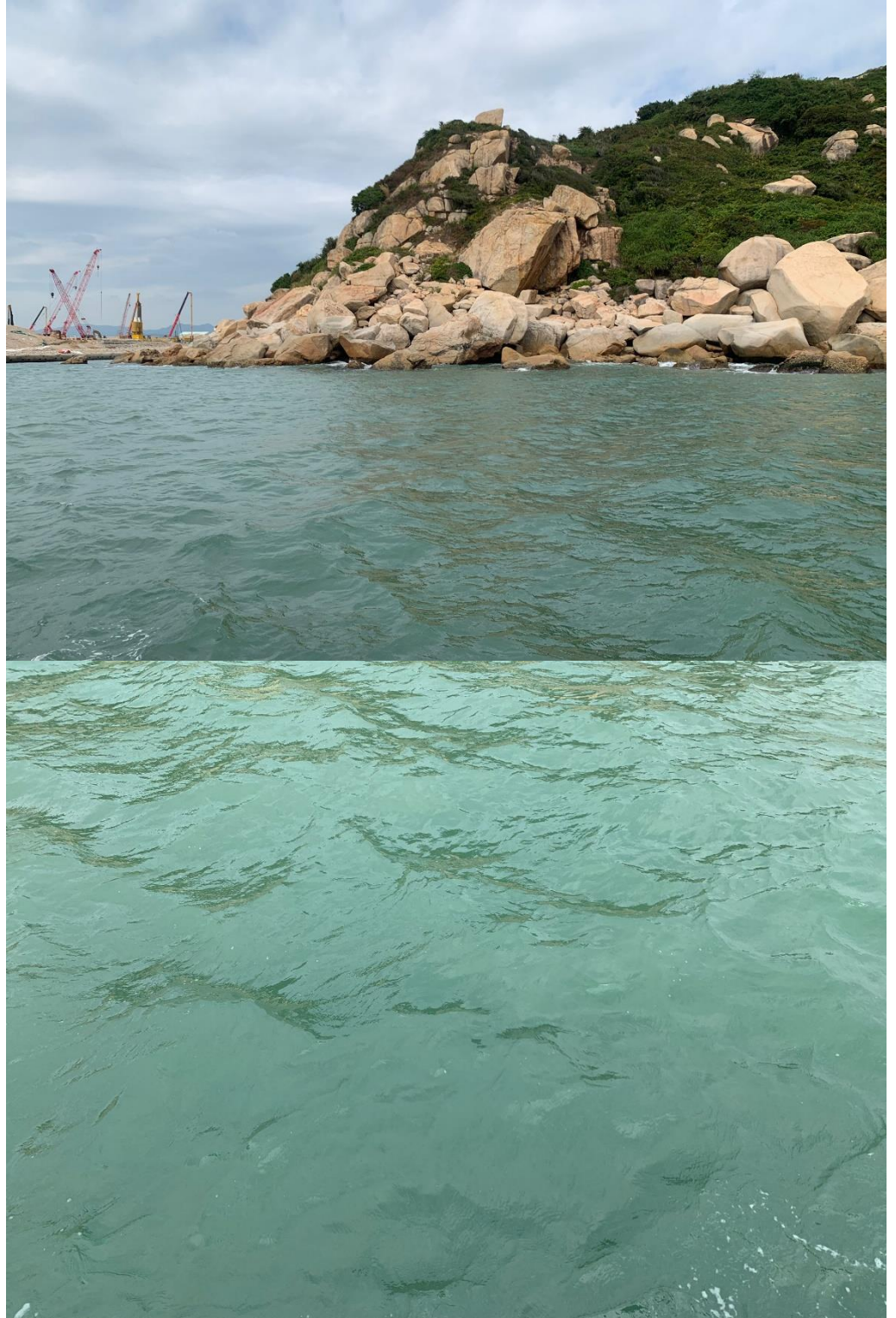




M1:



CR1:



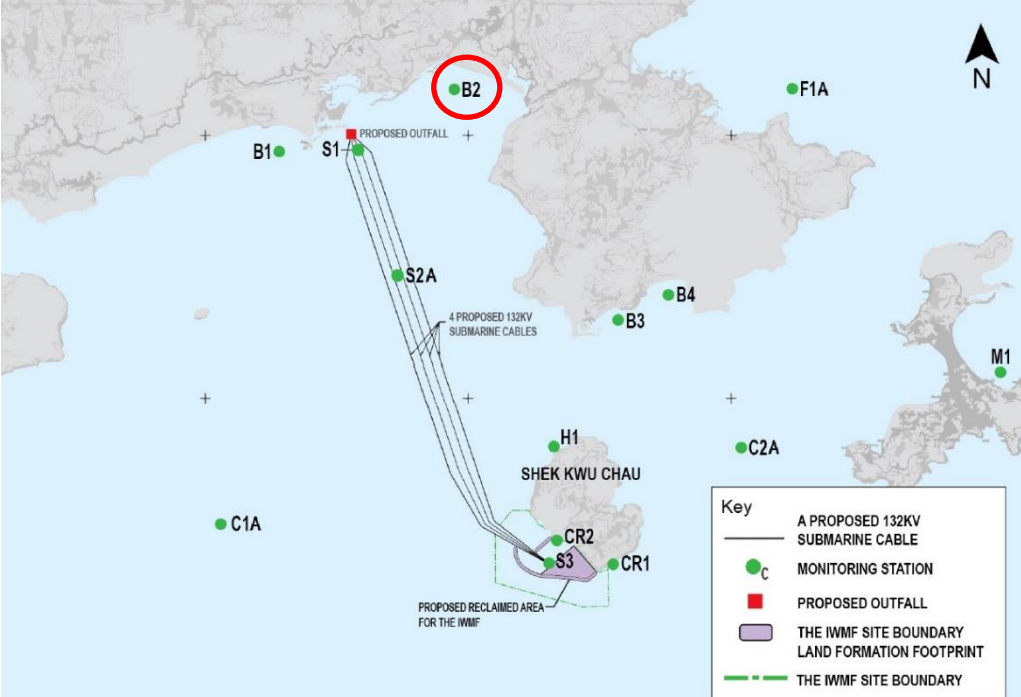


CR2:





Mid-Flood

<p>Monitoring Location</p>			
<p>Parameter</p>	<p>Suspended Solid (SS)</p>		
<p>Action &amp; Limit Levels</p>	<p>Action Level ≥ 11.8 mg/L (120% of C2A)</p>		<p>Limit Level ≥ 12.7 mg/L (130% of C2A)</p>
<p>Measurement Level</p>	<p>Impact Station(s) of Exceedance 12.8 mg/L (B2)</p>	<p>Control Stations 11.3 mg/L (C1A) 9.8 mg/L (C2A)</p>	<p>Impact Station(s) without Exceedance 8.5 mg/L (B1) 8.0 mg/L (B3) 9.0 mg/L (B4) 10.5 mg/L (F1A) 11.0 mg/L (H1) 9.3 mg/L (M1) 10.7 mg/L (CR1) 9.0 mg/L (CR2)</p>
<p>Possible reason for Action or Limit Level Non-compliance</p>	<p>Works scheduled on site on 17 Dec 2021 include laying of 1T armour rock at Seawall A CH300 - CH350, laying of 900kg armour rock at Seawall A CH350 - CH440, leveling of underlayer rock at BWA CH920 - 950, installation of blockwork for marine access facility, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile and existing caisson extension and armour scour protection.</p> <p>Dominant sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>An exceedance of limit level was found at B2.</p> <p>B2 is located at unrelated stream direction (neither upstream nor downstream, far away) to the works location. The exceedance at this monitoring station is deemed to be unrelated to the Project.</p>		

	<p>The installation of caisson No.19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and the weather was cloudy during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 23 Dec 2021.</p> <p>After the investigation, the exceedance on 17 Dec 2021 at B2 is deemed to be unrelated to the Project.</p>
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Monitoring photos of  
stations with exceedance

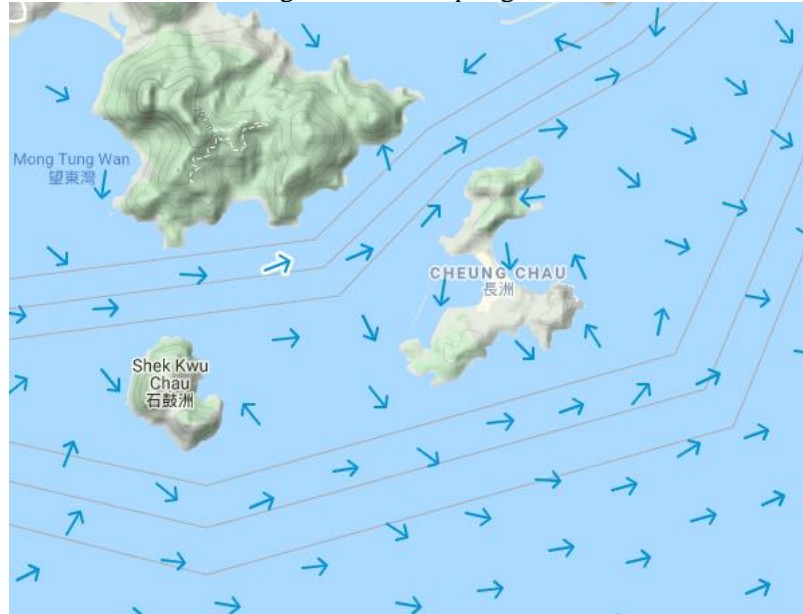
B2:



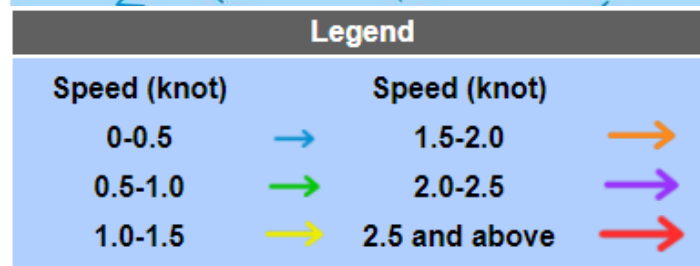


Remarks

Current direction during mid-ebb sampling on 17 Dec 2021:



Current direction during mid-flood sampling on 17 Dec 2021:



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

Prepared by Jack Chow

Date 10 Jan 2022

Incident Report on Action Level or Limit Level Non-compliance

Project	Integrated Waste Management Facilities, Phase 1		
Date	20 Dec 2021 (Lab result received on 24 Dec 2021)		
Time	08:00 – 10:42 (Mid-Flood)		
Monitoring Location	<p style="text-align: center;">Mid-Flood</p> <p>B1, B2, B3, B4, F1A, H1, M1, CR1 and CR2</p> <p>The map shows the Shek Kwu Chau area with various monitoring stations marked by green dots. Stations B1, B2, B3, B4, F1A, H1, M1, CR1, and CR2 are circled in red. A red square indicates the proposed outfall. Green lines represent the proposed 132KV submarine cables. A purple shaded area shows the IWMF site boundary and land formation footprint. A key in the bottom right corner defines the symbols: A PROPOSED 132KV SUBMARINE CABLE (green line), MONITORING STATION (green dot), PROPOSED OUTFALL (red square), THE IWMF SITE BOUNDARY LAND FORMATION FOOTPRINT (purple shaded area), and THE IWMF SITE BOUNDARY (green dashed line). A north arrow is also present.</p>		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 9.2 mg/L (120% of C2A)		≥ 10.0 mg/L
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	13.8 mg/L (B1) 13.0 mg/L (B2) 15.0 mg/L (B3) 17.0 mg/L (B4) 9.5 mg/L (F1A) 13.7 mg/L (H1) 14.8 mg/L (M1) 17.0 mg/L (CR1) 15.8 mg/L (CR2)	10.3 mg/L (C1A) 7.7 mg/L (C2A)	N/A
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 20 Dec 2021 including transferring underlayer rock, laying of underlayer rock at Breakwater B Caisson J4, installation of block work at marine access facility, landfill works for the below +6.0mPD, landfilling works for the above +6.0mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-piles, existing caisson extension, and armour scour protection.</p> <p>Dominant sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>Exceedances of limit level were found at B1, B2, B3, B4, H1, M1, CR1 and CR2. An exceedance of action level was found at F1A.</p>		

B1, B2, B3, B4, F1A, H1 and M1 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.

CR1 and CR2 are located close to the works location within the Project site while no major marine work was conducted on 20 Dec 2021.

The installation of caisson No. 19 was completed on 18 Mar 2021, the reclamation area was enclosed.

According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and weather was cloudy during the sampling event.

No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 14 and 23 Dec 2021.

After the investigation, the exceedances on 20 Dec 2021 at B1, B2, B3, B4, F1A, H1, M1, CR1 and CR2 are deemed to be unrelated to the Project.



Monitoring photos of  
stations with exceedance

B1:



B2:



B3:





B4:



F1A:



H1:





M1:



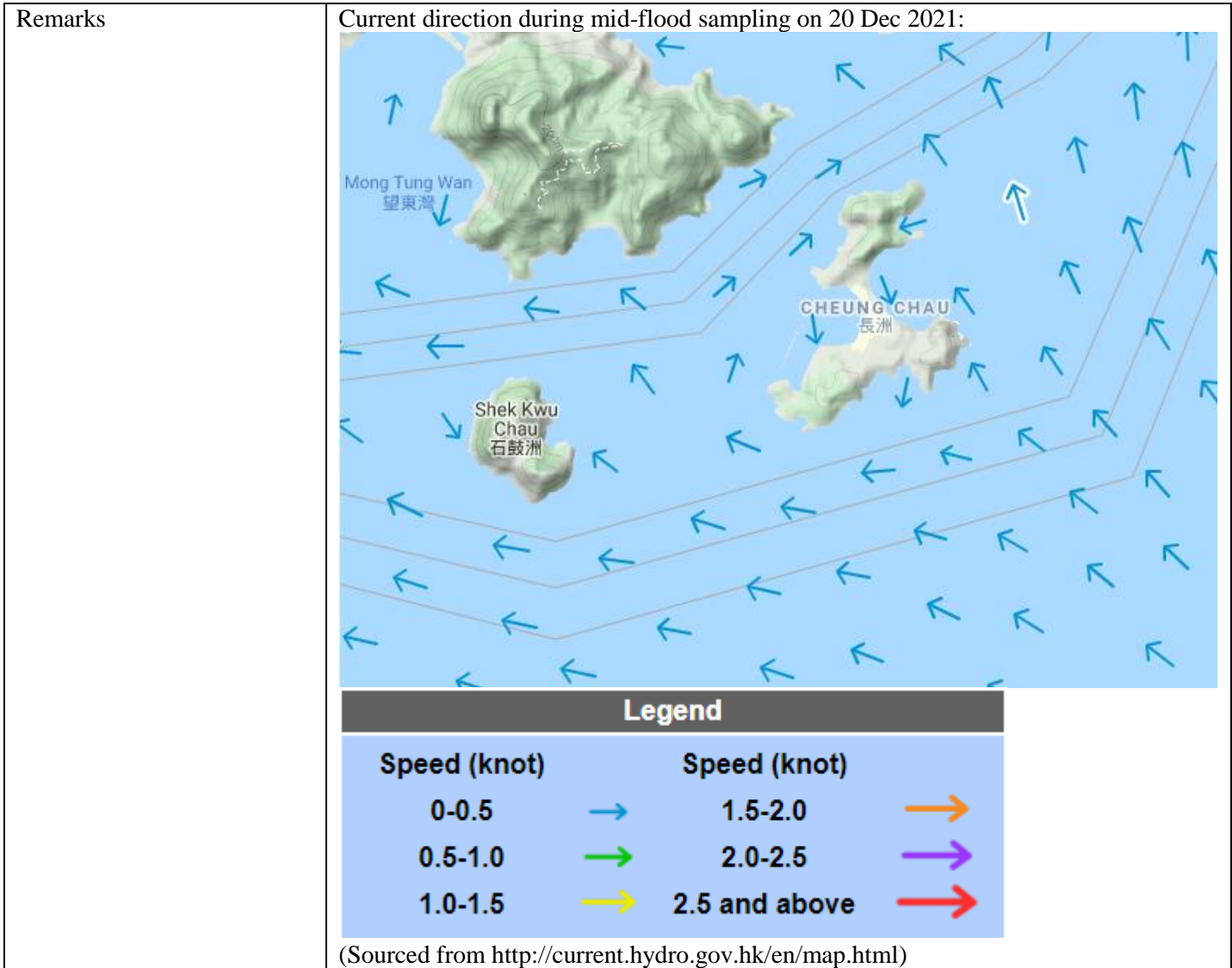
CR1:



CR2:







Prepared by	Howard Chan
Date	07 Jan 2022

Incident Report on Action Level or Limit Level Non-compliance

Project	Integrated Waste Management Facilities, Phase 1		
Date	22 Dec 2021 (Lab result received on 29 Dec 2021)		
Time	12:48– 14:54 (Mid-Flood)		
Mid-Flood			
Monitoring Location	B2, M1, CR1 and CR2		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 8.4 mg/L (120% of C2A)		≥ 10.0 mg/L
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	8.5 mg/L (B2) 8.8 mg/L (M1) 8.7 mg/L (CR1) 9.3 mg/L (CR2)	6.3 mg/L (C1A) 7.0 mg/L (C2A)	5.0 mg/L (B1) 5.5 mg/L (B3) 6.3 mg/L (B4) 6.7 mg/L (F1A) 5.5 mg/L (H1)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 22 Dec 2021 include, levelling of 500 kg scour apron at Breakwater B, installation of layer 8 block work, levelling of underlayer rock at Breakwater A, transloading public fill from Zone C to Zone A, filling and levelling public fill at Zone J, drilling of boreholes, piling works, pre-boring works for driven H piles, landfill work for below +6.00mPD, armour scour protection and formwork erection.</p> <p>Dominant sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>Exceedances of action level were found at B2, M1, CR1 and CR2.</p> <p>B2 and M1 are located at unrelated stream direction (neither upstream nor downstream, far away) to the works location, exceedances at these monitoring stations are deemed to be unrelated to the Project.</p>		

	<p>CR1 and CR2 are located close to the works location within the Project site while no major marine work was conducted on 22 Dec 2021.</p> <p>The installation of caisson No. 19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and weather was fine during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 14 and 23 Dec 2021.</p> <p>After the investigation, the exceedances on 22 Dec 2021 at B2, M1, CR1 and CR2 are deemed to be unrelated to the Project.</p>
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Monitoring photos of  
stations with exceedance

B2:



M1:





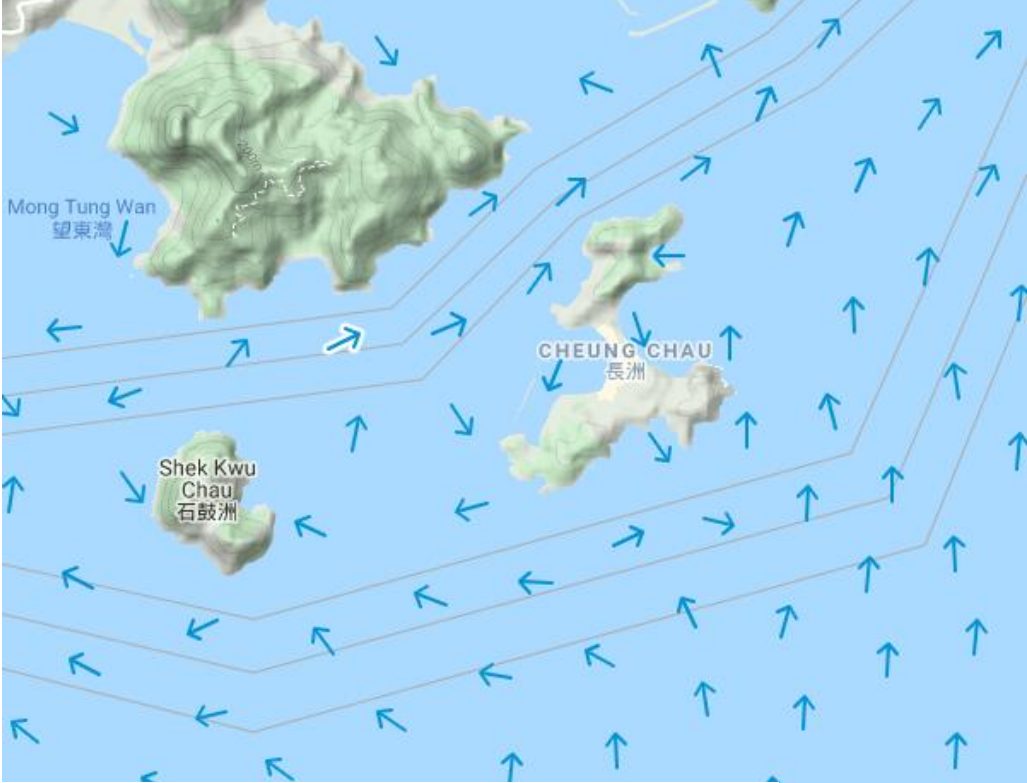
CR1:





CR2:



<p>Remarks</p>	<p>Current direction during mid-flood sampling on 22 Dec 2021:</p>  <p><b>Legend</b></p> <table border="1"> <thead> <tr> <th>Speed (knot)</th> <th>Speed (knot)</th> </tr> </thead> <tbody> <tr> <td>0-0.5</td> <td>1.5-2.0</td> </tr> <tr> <td>0.5-1.0</td> <td>2.0-2.5</td> </tr> <tr> <td>1.0-1.5</td> <td>2.5 and above</td> </tr> </tbody> </table> <p>(Sourced from <a href="http://current.hydro.gov.hk/en/map.html">http://current.hydro.gov.hk/en/map.html</a>)</p>	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
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								
<p>Prepared by</p>	<p>Howard Chan</p>								
<p>Date</p>	<p>06 Jan 2022</p>								

Incident Report on Action Level or Limit Level Non-compliance

Project	Integrated Waste Management Facilities, Phase 1		
Date	24 Dec 2021 (Lab result received on 31 Dec 2021)		
Time	08:49 – 12:19 (Mid-Flood) 14:06 – 16:08 (Mid-Ebb)		
Mid-Flood			
Monitoring Location	B3, B4 and CR2		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 9.4 mg/L (120% of C2A)		≥ 10.1 mg/L (130% of C2A)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	10.0 mg/L (B3) 9.8 mg/L (B4) 10.2 mg/L (CR2)	6.8 mg/L (C1A) 7.8 mg/L (C2A)	6.5 mg/L (B1) 5.8 mg/L (B2) 7.0 mg/L (F1A) 5.0 mg/L (H1) 8.0 mg/L (M1) 7.8 mg/L (CR1)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on 24 Dec 2021 include, levelling of 500kg scour apron at Breakwater B CH60 - Ch180, laying of 100 – 150kg underlayer rock at Breakwater A CH730 – CH760, installation of block work at marine access facility, levelling of underlayer rock at Breakwater A CH940 - CH960, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pipe, piling works for pre-bored socketed H-pipe, existing caisson extension, and armour scour protection.</p> <p>Dominant sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>Exceedances of action level were found at B3 and B4 and exceedance of limit level was found at CR2.</p>		



	<p>B3 and B4 are located at unrelated stream direction (neither upstream nor downstream, far away) to the works location, exceedance of the monitoring station is deemed to be unrelated to the Project.</p> <p>CR2 is located close to the works location within the Project site while no major marine work was conducted on 24 Dec 2021.</p> <p>The installation of caisson No. 19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and weather was fine during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 24 and 29 Dec 21.</p> <p>After the investigation, the exceedances on 24 Dec 2021 at B3, B4 and CR2 are deemed to be unrelated to the Project.</p>
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Monitoring photos of  
stations with exceedance

B3:



B4:





CR2:



Mid-Ebb			
Monitoring Location	B1, B2, B3, B4 and H1		
	<p>The map displays the project area with various monitoring stations and infrastructure. Stations B1, B2, B3, B4, and H1 are circled in red. A red square indicates the proposed outfall. Green dots represent monitoring stations C1A, F1A, M1, C2A, S1, S2A, S3, CR1, and CR2. A purple shaded area shows the IWMF site boundary footprint, and a dashed green line shows the IWMF site boundary. A legend in the bottom right corner defines these symbols.</p>		
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
	18.5 mg/L (B1) 15.0 mg/L (B2) 21.0 mg/L (B3) 19.8 mg/L (B4) 18.2 mg/L (H1)	8.3 mg/L (C1A) 8.2 mg/L (C2A)	6.0 mg/L (F1) 7.5 mg/L (M1) 9.3 mg/L (CR1) 6.8 mg/L (CR2)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on 24 Dec 2021 include, levelling of 500kg scour apron at Breakwater B CH60 - Ch180, laying of 100 – 150kg underlayer rock at Breakwater A CH730 – CH760, installation of block work at marine access facility, leveling of underlayer rock at Breakwater A CH940 - CH960, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pipe, piling works for pre-bored socketed H-pipe, existing caisson extension, and armour scour protection.</p> <p>Dominant sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>Exceedances of limit level were found at B1, B2, B3, B4 and H1.</p> <p>B1, B2, B3, B4 and H1 are located at unrelated stream direction (neither upstream nor downstream) to the works location. Exceedances at these monitoring stations are deemed to be unrelated to the Project.</p> <p>The installation of caisson No. 19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p>		

	<p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and the weather was fine during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 24 and 29 Dec 21.</p> <p>After the investigation, the exceedances on 24 Dec 2021 at B1, B2, B3, B4 and H1 are deemed to be unrelated to the Project.</p>
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Monitoring photos of  
stations with exceedance

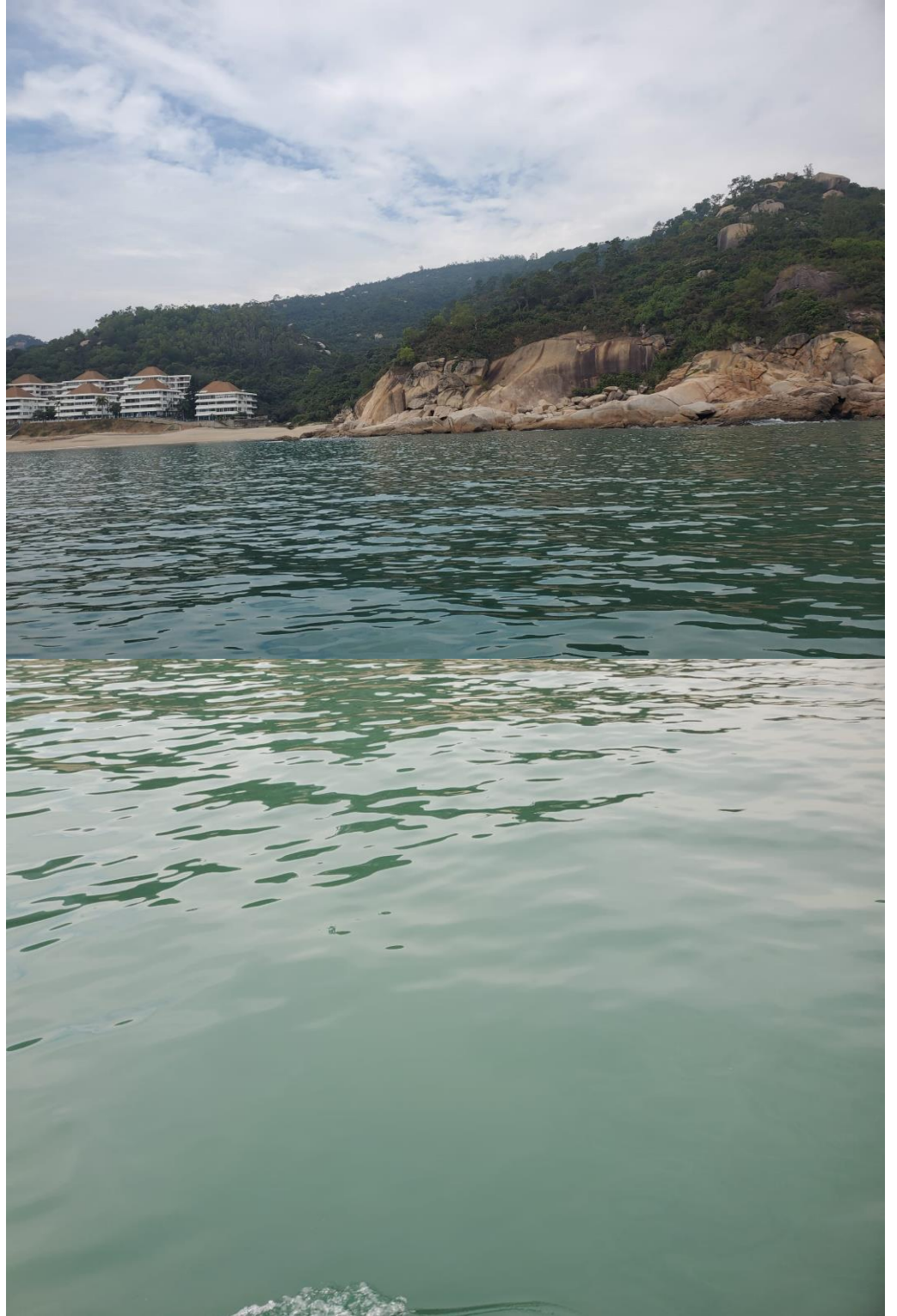
B1:



B2:



B3:





B4:

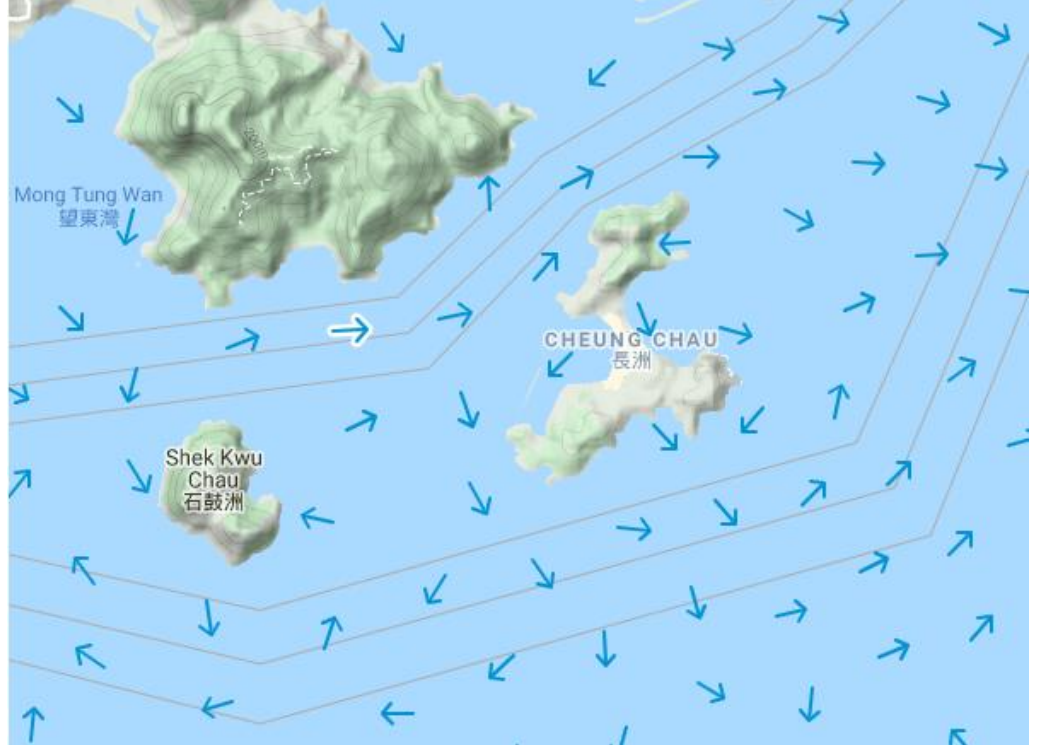


H1:

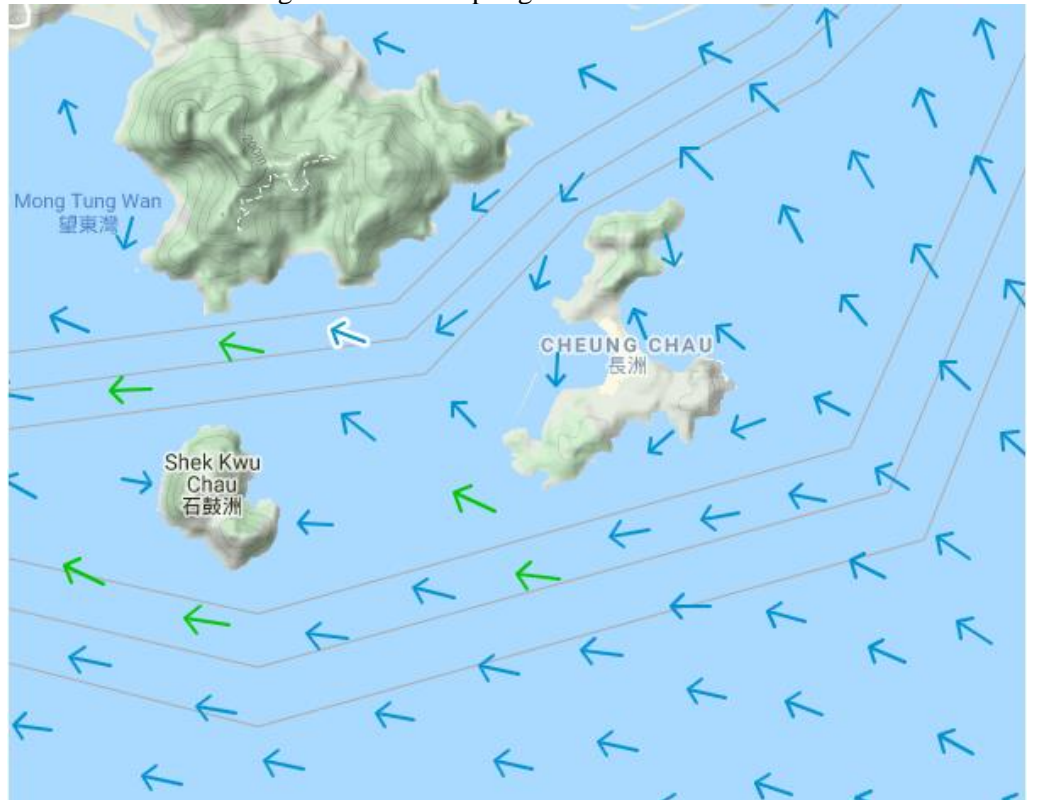


Remarks

Current direction during mid-ebb sampling on 24 Dec 2021:



Current direction during mid-flood sampling on 24 Dec 2021:





	<b>Legend</b>								
	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Speed (knot)</th> <th style="text-align: left; padding: 5px;">Speed (knot)</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">0-0.5       →</td> <td style="padding: 5px;">1.5-2.0       →</td> </tr> <tr> <td style="padding: 5px;">0.5-1.0     →</td> <td style="padding: 5px;">2.0-2.5       →</td> </tr> <tr> <td style="padding: 5px;">1.0-1.5     →</td> <td style="padding: 5px;">2.5 and above  →</td> </tr> </tbody> </table>	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  →
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 <a href="http://current.hydro.gov.hk/en/map.html">http://current.hydro.gov.hk/en/map.html</a> )									
Prepared by	Howard Chan								
Date	11 Jan 2022								

Incident Report on Action Level or Limit Level Non-compliance

Project	Integrated Waste Management Facilities, Phase 1		
Date	27 Dec 2021 (Lab result received on 3 January 2022)		
Time	11:19 – 14:49 (Mid-Flood) 16:57 – 19:00 (Mid-Ebb)		
Mid-Flood			
Monitoring Location	B3, B4 and H1		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 10.4 mg/L (120% of C2A)		≥ 11.3 mg/L (130% of C2A)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	12.0 mg/L (B3) 12.0 mg/L (B4) 11.0 mg/L (H1)	10.2 mg/L (C1A) 8.7 mg/L (C2A)	9.0 mg/L (B1) 7.0 mg/L (B2) 9.5 mg/L (F1A) 9.2 mg/L (M1) 9.3 mg/L (CR1) 7.0 mg/L (CR2)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on 27 Dec 2021 include installation of block work at marine access facility, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile, existing caisson extension and armour scour protection.</p> <p>Dominant sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.</p> <p>Exceedances of limit level were found at B3 and B4 and an exceedance of action level was found at H1.</p> <p>B3 and B4 are located at unrelated stream direction (neither upstream nor downstream, far away) to the works location. Exceedances at these monitoring stations are deemed to be unrelated to the Project.</p>		

	<p>H1 is the downstream of the Project site during Flood tide while no marine work was conducted on 27 Dec 2021.</p> <p>The installation of caisson No. 19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and weather was fine during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 24 and 29 Dec 21.</p> <p>After the investigation, the exceedances on 27 Dec 2021 at B3, B4 and H1 are deemed to be unrelated to the Project.</p>
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Monitoring photos of  
stations with exceedance

B3:



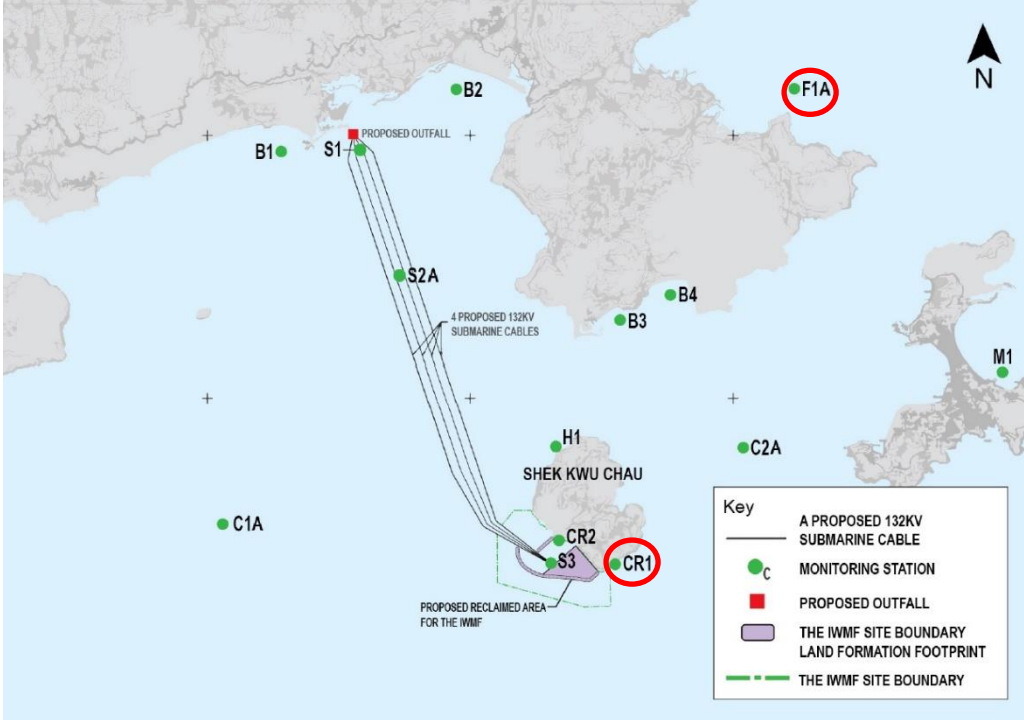
B4:



H1:





Mid-Ebb			
Monitoring Location	F1A and CR1 		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 10.6 mg/L (120% of C1A)		≥ 11.4 mg/L (130% of C1A)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	12.7 mg/L (F1A) 11.5 mg/L (CR1)	8.8 mg/L (C1A) 8.5 mg/L (C2A)	9.8 mg/L (B1) 9.3 mg/L (B2) 8.5 mg/L (B3) 9.0 mg/L (B4) 8.2 mg/L (H1) 9.0 mg/L (M1) 9.5 mg/L (CR2)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on 27 Dec 2021 include installation of block work at marine access facility, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile, existing caisson extension and armour scour protection.</p> <p>Dominant sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>Exceedances of limit level were found at F1A and CR1.</p> <p>F1A is located at unrelated stream direction (neither upstream nor downstream) to the works location. Exceedances at the monitoring stations are deemed to be unrelated to the Project.</p> <p>CR1 is located close to the works location within the Project site while no major marine work was conducted on 27 Dec 2021.</p> <p>The installation of caisson No. 19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p>		

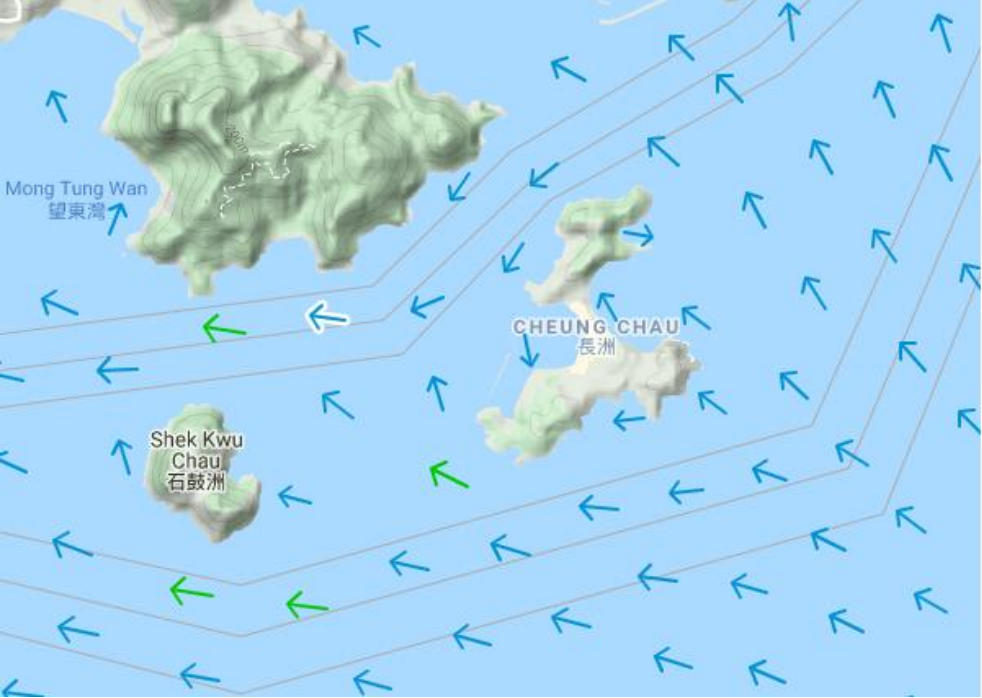
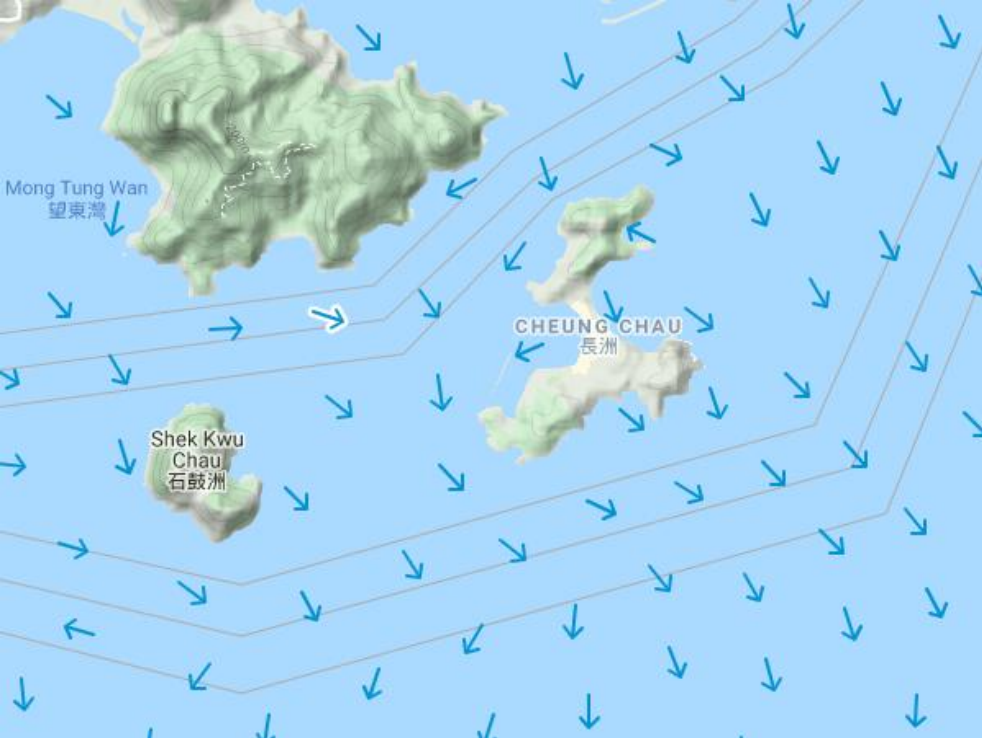
	<p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and weather was fine during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 24 and 29 Dec 21.</p> <p>After the investigation, the exceedances on 27 Dec 2021 at F1A and CR1 are deemed to be unrelated to the Project.</p>
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Monitoring photos of  
stations with exceedance

F1A:





	<p>CR1: No clear photos could be taken at the site after the sunset due to the darkness of surrounding environment.</p>
Remarks	<p>Current direction during mid-flood sampling on 27 Dec 2021:</p>  <p>Current direction during mid-ebb sampling on 27 Dec 2021:</p> 

	<b>Legend</b>							
	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Speed (knot)</th> <th style="text-align: left; padding: 5px;">Speed (knot)</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">0-0.5       →</td> <td style="padding: 5px;">1.5-2.0       →</td> </tr> <tr> <td style="padding: 5px;">0.5-1.0     →</td> <td style="padding: 5px;">2.0-2.5       →</td> </tr> <tr> <td style="padding: 5px;">1.0-1.5     →</td> <td style="padding: 5px;">2.5 and above  →</td> </tr> </tbody> </table>	Speed (knot)	Speed (knot)	0-0.5       →	1.5-2.0       →	0.5-1.0     →	2.0-2.5       →	1.0-1.5     →
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 <a href="http://current.hydro.gov.hk/en/map.html">http://current.hydro.gov.hk/en/map.html</a> )								
Prepared by	Howard Chan							
Date	11 Jan 2022							

Incident Report on Action Level or Limit Level Non-compliance

Project	Integrated Waste Management Facilities, Phase 1		
Date	29 Dec 2021 (Lab result received on 05 Jan 2022)		
Time	08:00 – 10:42 (Mid-Ebb)		
Mid-Ebb			
Monitoring Location	<p>F1A</p>		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 27.2 mg/L (120% of C1A)		≥ 29.5 mg/L (130% of C1A)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	28.8 mg/L (F1A)	22.7 mg/L (C1A) 27.0 mg/L (C2A)	11.0 mg/L (B1) 10.5 mg/L (B2) 8.8 mg/L (B3) 8.3 mg/L (B4) 13.3 mg/L (M1) 8.8 mg/L (H1) 10.0 mg/L (CR1) 10.7 mg/L (CR2)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on site on 29 Dec 2021 include leveling of 500kg scour apron at Breakwater B CH190 - CH220, leveling of 100 - 150kg underlayer rock at Breakwater A CH770 -CH780, leveling of underlayer rock at Breakwater A CH950 - CH970, installation of blockwork for marine access facility, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile and existing caisson extension and armour scour protection.</p> <p>Dominant sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p>		



	<p>An exceedance of action level was found at F1A.</p> <p>F1A was located at unrelated stream direction (neither upstream nor downstream, far away) to the works location, the exceedance at this monitoring station is deemed to be unrelated to the Project.</p> <p>The installation of caisson No.19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and the weather was cloudy during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 29 Dec 2021.</p> <p>After the investigation, the exceedance on 29 Dec 2021 at F1A is deemed to be unrelated to the Project.</p>
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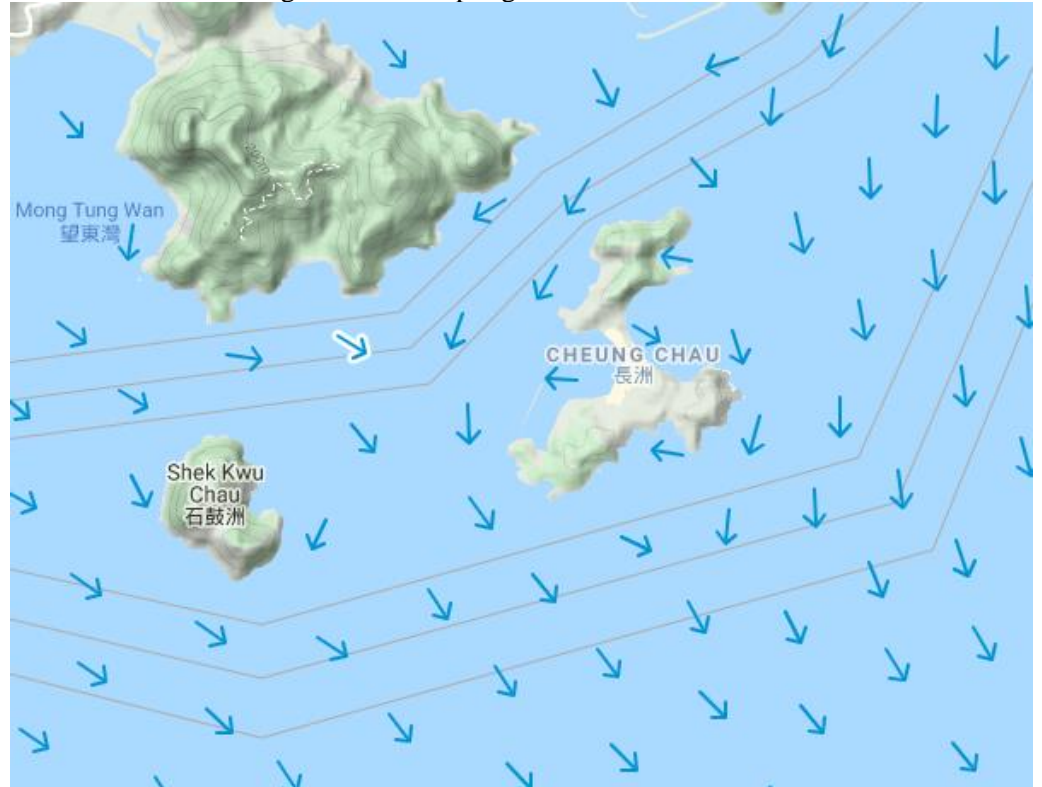
Monitoring photos of  
stations with exceedance

F1A:



Remarks

Current direction during mid-ebb sampling on 29 Dec 2021:



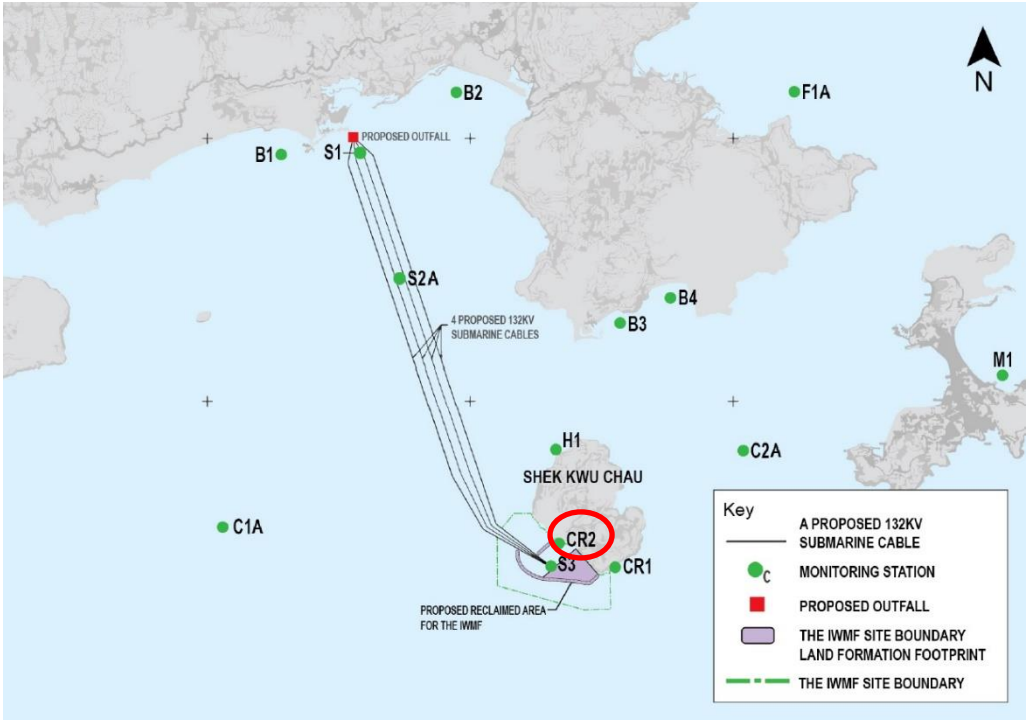
Legend			
Speed (knot)		Speed (knot)	
0-0.5		1.5-2.0	
0.5-1.0		2.0-2.5	
1.0-1.5		2.5 and above	

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

Prepared by Jack Chow

Date 11 Jan 2022

Incident Report on Action Level or Limit Level Non-compliance

Project	Integrated Waste Management Facilities, Phase 1		
Date	31 Dec 2021 (Lab result received on 06 January 2022)		
Time	13:54 – 17:24 (Mid-Flood) 08:33 – 12:03 (Mid-Ebb)		
Mid-Flood			
Monitoring Location	CR2 		
Parameter	Suspended Solid (SS)		
Action & Limit Levels	Action Level		Limit Level
	≥ 11.2 mg/L (120% of C2A)		≥ 12.1 mg/L (130% of C2A)
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance
	12.2 mg/L (CR2)	10.5 mg/L (C1A) 9.3 mg/L (C2A)	3.5 mg/L (B1) 3.0 mg/L (B2) 3.0 mg/L (B3) 3.7 mg/L (B4) 3.8 mg/L (H1) 3.6 mg/L (M1) 4.8 mg/L (F1A) 3.6 mg/L (CR1)
Possible reason for Action or Limit Level Non-compliance	Works scheduled on 31 Dec 2021 include installation of block work at marine access facility, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile, existing caisson extension and armour scour protection.  Dominant sea current direction was found to be from Southeast to Northwest at waters around Shek Kwu Chau.  Exceedance of limit level was found at CR2.		

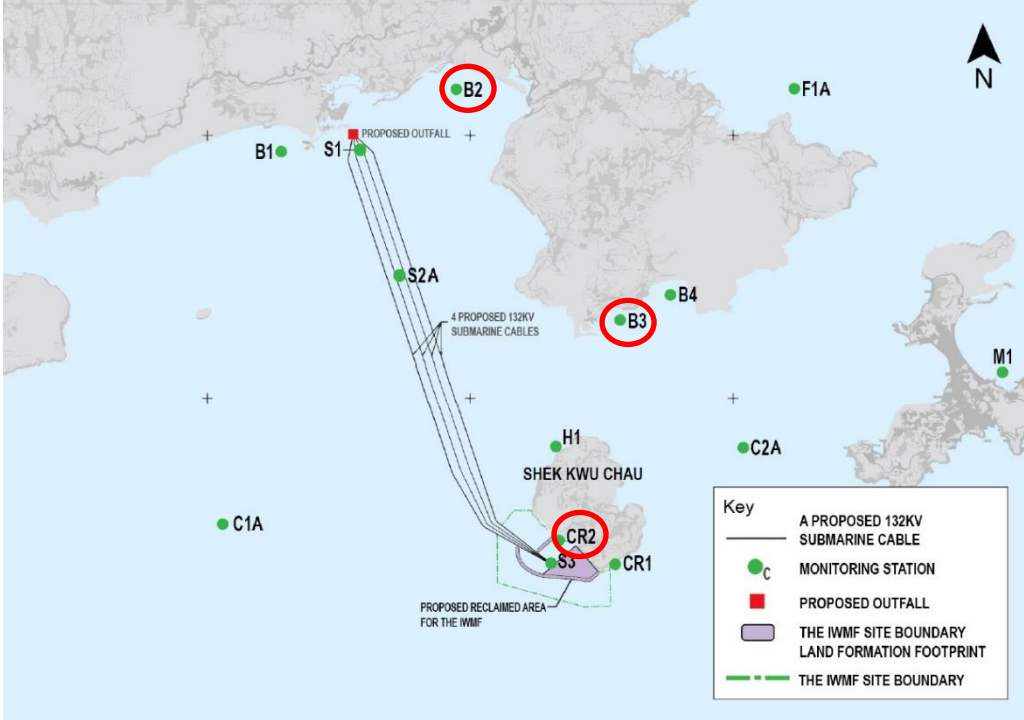


	<p>CR2 is located close to the works location within the Project site while no major marine work was conducted on 31 Dec 2021.</p> <p>The installation of caisson No. 19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and weather was fine during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 29 Dec 2021 and 04 Jan 2022.</p> <p>After the investigation, the exceedances on 31 Dec 2021 at CR2 is deemed to be unrelated to the Project.</p>
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Monitoring photos of  
stations with exceedance

CR2:



Mid-Ebb			
Monitoring Location	B2, B3 and CR2 		
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
	8.5 mg/L (B2) 11.0 mg/L (B3) 10.0 mg/L (CR2)	4.5 mg/L (C1A) 11.0 mg/L (C2A)	4.0 mg/L (B1) 7.8 mg/L (B4) 5.0 mg/L (H1) 4.8 mg/L (M1) 4.2 mg/L (F1A) 6.2 mg/L (CR1)
Possible reason for Action or Limit Level Non-compliance	<p>Works scheduled on 31 Dec 2021 include installation of block work at marine access facility, landfilling works for below +6.00mPD, landfilling works for above +6.00mPD, installation of instrumentation, piling pre-drilling works, piling works, piling works for driven pile, piling works for pre-bored socketed H-pile, existing caisson extension and armour scour protection.</p> <p>Dominant sea current direction was found to be from Northwest to Southeast at waters around Shek Kwu Chau.</p> <p>An exceedance of action level was found at B2 and exceedances of limit level were found at B3 and CR2.</p> <p>B2 and B3 are located at unrelated stream direction (neither upstream nor downstream) to the works location. Exceedances at these monitoring stations are deemed to be unrelated to the Project.</p> <p>CR2 is located close to the works location within the Project site while no major marine work was conducted on 31 Dec 2021.</p>		

	<p>The installation of caisson No. 19 was completed on 18 Mar 2021, the reclamation area was enclosed.</p> <p>According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site and weather was fine during the sampling event.</p> <p>No major observation of improper site practices that contributed to the increase of the suspended solids were recorded during the weekly inspection on 29 Dec 2021 and 04 Jan 2022.</p> <p>After the investigation, the exceedances on 31 Dec 2021 at B2, B3 and CR2 are deemed to be unrelated to the Project.</p>
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Monitoring photos of  
stations with exceedance

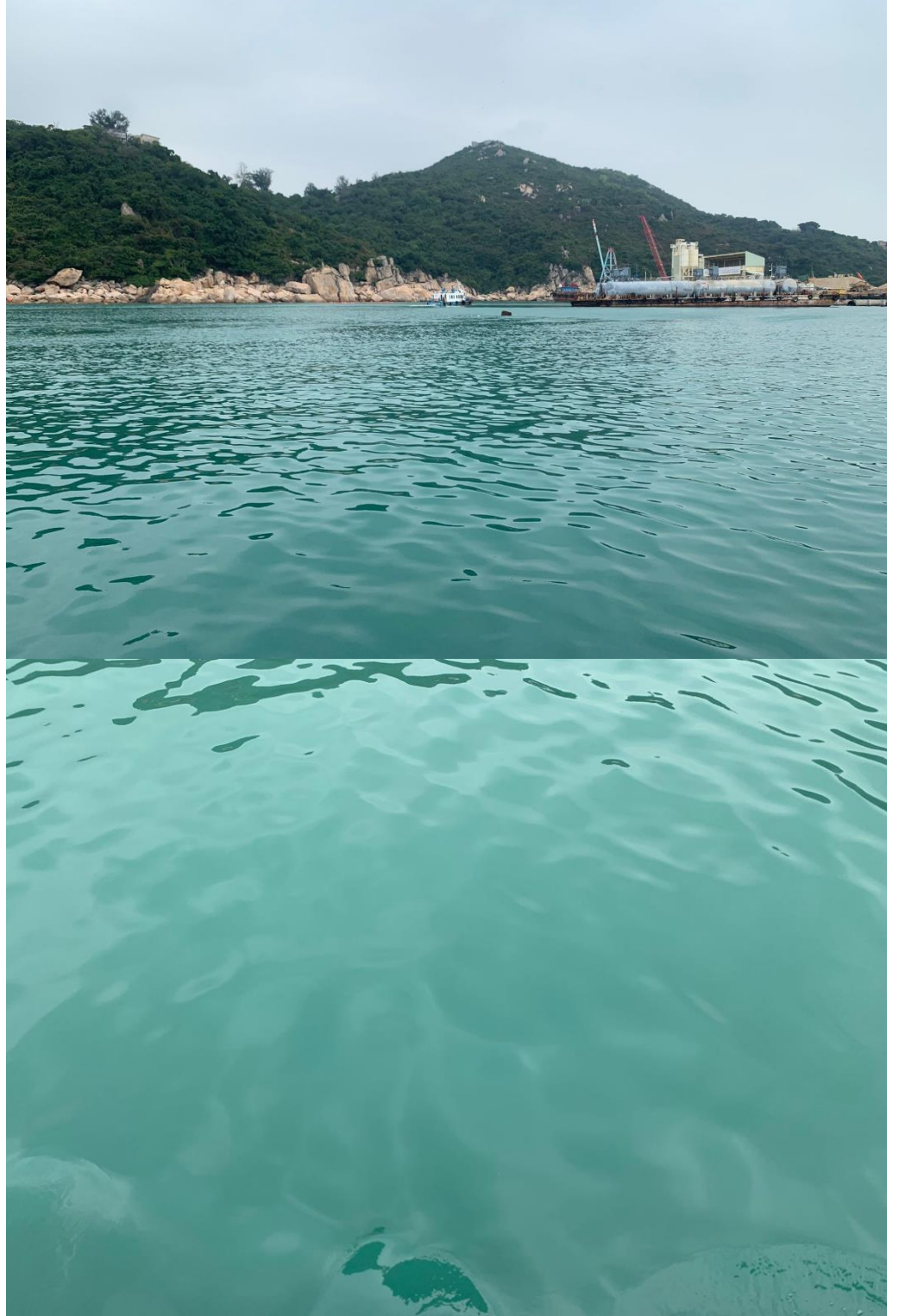
B2:



B3:



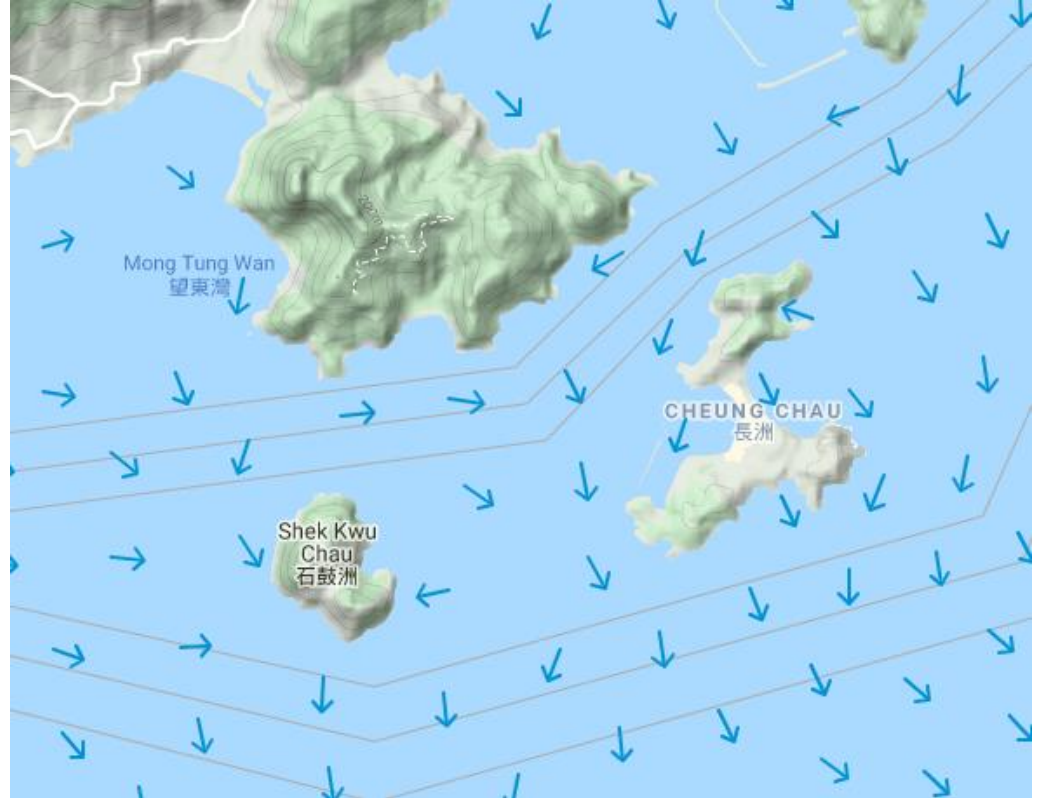
CR2:



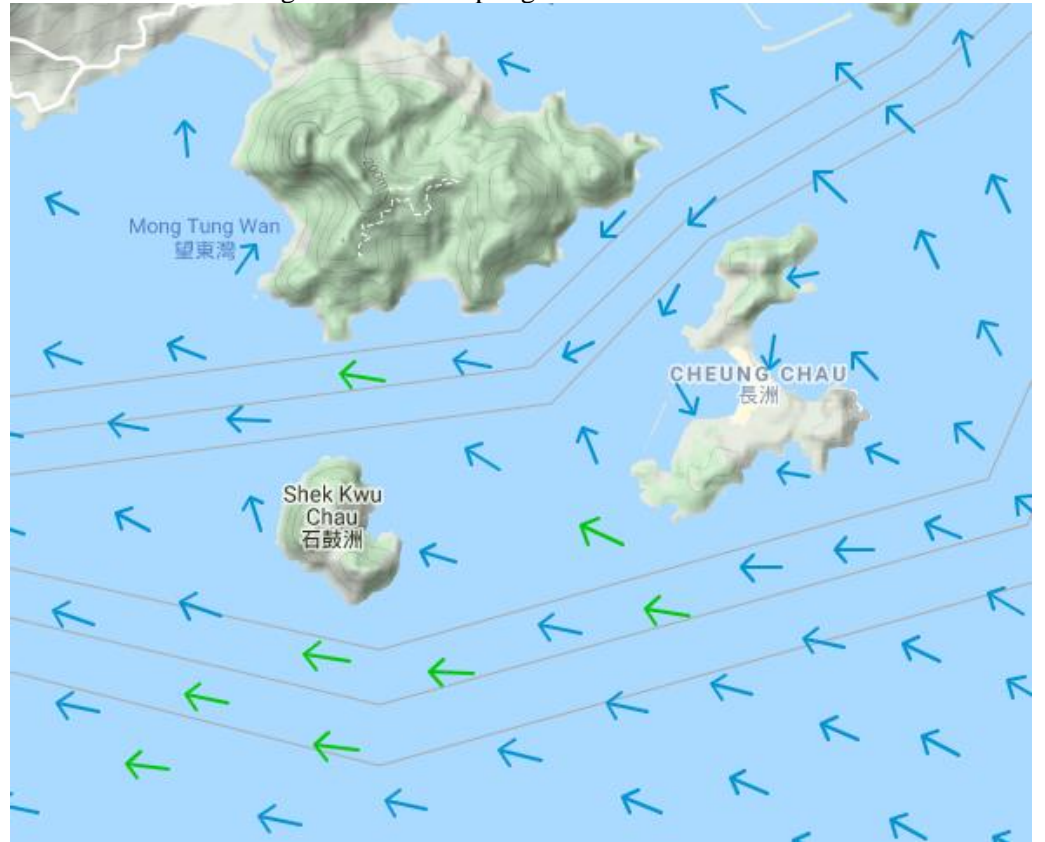


Remarks

Current direction during mid-ebb sampling on 31 Dec 2021:



Current direction during mid-flood sampling on 31 Dec 2021:





	<b>Legend</b>								
	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Speed (knot)</th> <th style="text-align: left; padding: 5px;">Speed (knot)</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">0-0.5       →</td> <td style="padding: 5px;">1.5-2.0       →</td> </tr> <tr> <td style="padding: 5px;">0.5-1.0       →</td> <td style="padding: 5px;">2.0-2.5       →</td> </tr> <tr> <td style="padding: 5px;">1.0-1.5       →</td> <td style="padding: 5px;">2.5 and above       →</td> </tr> </tbody> </table>	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       →
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 <a href="http://current.hydro.gov.hk/en/map.html">http://current.hydro.gov.hk/en/map.html</a> )									
Prepared by	Jack Chow								
Date	11 Jan 2022								