


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

Contract	Contract No. HY/2013/04 HZMB HKBCF – Infrastructure Works Stage II (Southern Portion)																																																																										
Ref. No.	E093																																																																										
Date	10 October 2018																																																																										
Time (hh:mm)	See below																																																																										
Monitoring Location	SR6																																																																										
Parameter	Water Quality – Suspended Solids (in mg/L)																																																																										
Action Level	See below																																																																										
Limit Level	See below																																																																										
Measured Level	<p>Action &amp; Limit Level (AL &amp; LL) / Measured Level:</p> <table border="1"> <thead> <tr> <th>Param.</th><th>Unit</th><th>Station</th><th>Depth</th><th>Action Level</th><th>Limit Level</th><th>Measurement at Mid-Ebb Tide</th><th>Measurement at Mid-Flood Tide</th></tr> </thead> <tbody> <tr> <td>SS</td><td>mg/L</td><td>SR6</td><td>Depth Averaged</td><td>23.5 and 120% (i.e. 14.9 for mid-flood) of upstream control station's SS at the same tide of the same day</td><td>34.4 and 130% (i.e. 16.2 for mid-flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes</td><td>17.4</td><td>29.4</td></tr> </tbody> </table> <p>Sampling Time:</p> <table border="1"> <thead> <tr> <th></th><th>Mid-Ebb</th><th>Mid-Flood</th></tr> </thead> <tbody> <tr><td>IS5</td><td>12:07</td><td>08:01</td></tr> <tr><td>IS(Mf)6</td><td>12:13</td><td>07:55</td></tr> <tr><td>IS7</td><td>12:20</td><td>07:48</td></tr> <tr><td>IS8</td><td>12:31</td><td>07:31</td></tr> <tr><td>IS(Mf)9</td><td>12:25</td><td>07:37</td></tr> <tr><td>IS10(N)</td><td>12:55</td><td>07:18</td></tr> <tr><td>IS(Mf)11</td><td>13:00</td><td>07:12</td></tr> <tr><td>IS(Mf)16</td><td>12:54</td><td>07:09</td></tr> <tr><td>IS17</td><td>13:01</td><td>07:03</td></tr> <tr><td>SR3(N)</td><td>12:02</td><td>08:07</td></tr> <tr><td>SR4(N)</td><td>12:38</td><td>07:24</td></tr> <tr><td>SR5(N)</td><td>12:50</td><td>07:24</td></tr> <tr><td>SR6</td><td>12:01</td><td>08:20</td></tr> <tr><td>SR7</td><td>13:08</td><td>07:03</td></tr> <tr><td>SR10A(N)</td><td>13:49</td><td>06:12</td></tr> <tr><td>SR10B(N2)</td><td>13:44</td><td>06:20</td></tr> </tbody> </table> <p>Remarks:            Bold means AL exceedance            Bold with underline means LL exceedance            Upstream control stations of mid-ebb tide: CS(Mf)3(N) and CS4            Upstream control stations of mid-flood tide: CS(Mf)5, CS6 and CSA</p>								Param.	Unit	Station	Depth	Action Level	Limit Level	Measurement at Mid-Ebb Tide	Measurement at Mid-Flood Tide	SS	mg/L	SR6	Depth Averaged	23.5 and 120% (i.e. 14.9 for mid-flood) of upstream control station's SS at the same tide of the same day	34.4 and 130% (i.e. 16.2 for mid-flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	17.4	29.4		Mid-Ebb	Mid-Flood	IS5	12:07	08:01	IS(Mf)6	12:13	07:55	IS7	12:20	07:48	IS8	12:31	07:31	IS(Mf)9	12:25	07:37	IS10(N)	12:55	07:18	IS(Mf)11	13:00	07:12	IS(Mf)16	12:54	07:09	IS17	13:01	07:03	SR3(N)	12:02	08:07	SR4(N)	12:38	07:24	SR5(N)	12:50	07:24	SR6	12:01	08:20	SR7	13:08	07:03	SR10A(N)	13:49	06:12	SR10B(N2)	13:44	06:20
Param.	Unit	Station	Depth	Action Level	Limit Level	Measurement at Mid-Ebb Tide	Measurement at Mid-Flood Tide																																																																				
SS	mg/L	SR6	Depth Averaged	23.5 and 120% (i.e. 14.9 for mid-flood) of upstream control station's SS at the same tide of the same day	34.4 and 130% (i.e. 16.2 for mid-flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	17.4	29.4																																																																				
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SR10B(N2)	13:44	06:20																																																																									
Possible reason for Action or Limit Level Non-compliance	<p>On 10 October 2018, 1 no. AL exceedance of SS at station SR6 was recorded during mid-flood tide.</p> <p><u>Contract No. HY/2013/01</u></p> <p>As confirmed with the RSS and ET of Contract No. HY/2013/01, there were no marine transportation and no marine-based works performed under the Contract after January 2018. No site runoff within the Contract site was observed. All wastewater generated from construction site which potentially contained organic matter was collected by the registered collector. No organic matter discharge/accumulation at active works area was observed on 10 October 2018. Therefore, it is concluded that the exceedances were not related to the Contract.</p> <p><u>Contract No. HY/2013/02</u></p> <p>As confirmed with RSS, marine works were completed on 10 September 2017. ET of Contract No. HY/2013/02 confirmed that no organic matter discharge/accumulation was observed at active works areas on the date of exceedance. Therefore, it is concluded that the exceedances was not related to the Contract.</p>																																																																										

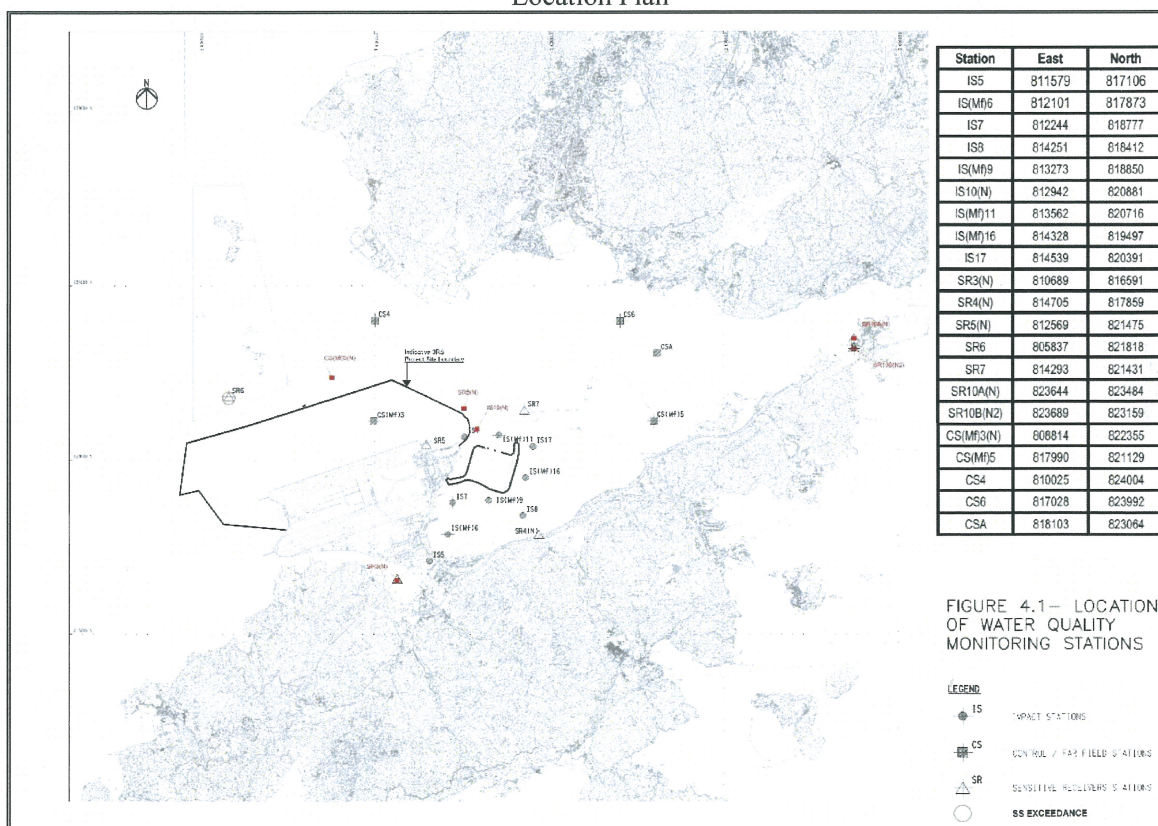
	<p><u>Contract No. HY/2013/03</u></p> <p>During weekly site audit on 4 and 11 October 2018, ET of Contract No. HY/2013/03 confirmed the Contractor had provided workable and effective water quality mitigation measures. There was no marine transportation on the date of exceedance. As confirmed with the Environmental Officer and operation team of this Contract, no organic matter discharge/accumulation at active works areas was observed on the date of exceedance. The marine-based works in Box Culvert B were completed. The ET of Contract No. HY/2013/03 concluded that the captioned exceedance was not related to the construction site activities of the Contract.</p> <p><u>Contract No. HY/2013/04</u></p> <p>According to the Contractor of HY/2013/04, all marine-based segment deliveries were completed in January 2018 and no marine-based works were conducted under the contract on 10 October 2018. Furthermore, there was no visible observation of any discharge or accumulation of organic matter at the active works areas within HY/2013/04 site area on 10 October 2018.</p> <p>HY/2013/04 site shoreline interfacing with open waters was inspected during ET's regular weekly site inspection on 10 October 2018 (between 14:40 and 14:50). It was observed that the silt curtain at Box Culvert D was installed properly, however the silt curtain at Box Culvert C was not reinstated. The Contractor was reminded to reinstate the silt curtain at Box Culvert C as soon as possible. There were no other observations in relation to the same shoreline.</p> <p>It was concluded that the exceedance was not due to HY/2013/04.</p> <p><u>Contract No. HY/2014/05</u></p> <p>This Contract did not involve any marine transportation or marine-based works. No site runoff within the Contract site was observed. Therefore, it is concluded that the exceedance was not related to the Contract.</p>
Actions taken / to be taken	<p><u>Contract No. HY/2013/01</u></p> <p>Although the exceedance was considered not due to HY/2013/01, the Contractor is reminded to implement all necessary water quality mitigation measures identified in the EM&amp;A Manual.</p> <p><u>Contract No. HY/2013/02</u></p> <p>Although the exceedance was considered not due to HY/2013/02, the Contractor is reminded to implement all necessary water quality mitigation measures identified in the EM&amp;A Manual.</p> <p><u>Contract No. HY/2013/03</u></p> <p>During weekly site audit on 4 and 11 October 2018, ET of Contract No. HY/2013/03 confirmed that the Contractor had provided workable and effective water quality mitigation measures.</p> <p><u>Contract No. HY/2013/04</u></p> <p>Actions were taken under Event and Action Plan (EAP):</p> <ol style="list-style-type: none"> <li>1. In situ measurement was repeated to confirm findings;</li> <li>2. After considering the above-mentioned investigation results, it appears that it was unlikely that the exceedance was attributed to active construction activities of this Contract;</li> <li>3. IEC, Contractor and ER were informed via email;</li> <li>4. Monitoring data, all plant, equipment and Contractor's working methods were checked;</li> </ol>

	<p>5. Since it is considered that the exceedance was unlikely to be contract related, as such, Actions 5-7 under the EAP are not considered applicable.</p> <p>However, the Contractor was also reminded to implement environmental mitigation measures in accordance with Environmental Mitigation Implementation Schedule.</p> <p><u>Contract No. HY/2014/05</u></p> <p>Although the exceedance was considered not due to HY/2014/05, the Contractor is reminded to implement all necessary water quality mitigation measures identified in the EM&amp;A Manual.</p>
Remarks	<p>ET of HY/2013/04 notified the exceedance as follows:</p> <ul style="list-style-type: none"> <li>24 October 2018 (Notification No. 20181010_NOE_r0)</li> <li>14 November 2018 (Notification No. 20181010_NOE_r1)</li> </ul>

(Location Plan – please refer below)

Prepared by: Gary Chow  
 Designation: Environmental Team Leader (Contract No. HY/2013/04)  
 Signature:   
 Date: 14 November 2018

Location Plan



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

Contract	Contract No. HY/2013/04 HZMB HKBCF – Infrastructure Works Stage II (Southern Portion)							
Ref. No.	E094							
Date	24 October 2018							
Time (hh:mm)	See below							
Monitoring Location	IS(Mf)6							
Parameter	Water Quality – Turbidity (in NTU)							
Action Level	See below							
Limit Level	See below							
Measured Level	Action & Limit Level (AL & LL) / Measured Level:							
	Param.	Unit	Station	Depth	Action Level	Limit Level	Measurement at Mid-Ebb Tide	Measurement at Mid-Flood Tide
	TURB	NTU	IS(Mf)6	Depth Averaged	27.5 and 120% (i.e. 11.7 for mid-ebb) of upstream control station's turbidity at the same tide of the same day	47.0 and 130% (i.e. 12.7 for mid-ebb) of upstream control station's turbidity at the same tide of the same day	29.6	7.2
	Sampling Time:							
		Mid-Ebb	Mid-Flood					
	IS5	13:26	17:04					
	IS(Mf)6	13:19	17:11					
	IS7	13:11	17:19					
	IS8	12:55	17:35					
	IS(Mf)9	13:02	17:28					
IS10(N)	12:38	18:01						
IS(Mf)11	12:32	18:07						
IS(Mf)16	12:37	17:52						
IS17	12:31	17:58						
SR3(N)	13:32	16:58						
SR4(N)	12:51	17:39						
SR5(N)	12:46	17:54						
SR6	13:41	16:58						
SR7	12:24	18:15						
SR10A(N)	11:23	19:00						
SR10B(N2)	11:29	18:56						
Possible reason for Action or Limit Level Non-compliance	Remarks:							
	Bold means AL exceedance							
	Bold with underline means LL exceedance							
	Upstream control stations of mid-ebb tide: CS(Mf)3(N) and CS4							
	Upstream control stations of mid-flood tide: CS(Mf)5, CS6 and CSA							
Possible reason for Action or Limit Level Non-compliance	On 24 October 2018, 1 no. AL exceedance of turbidity at station IS(Mf)6 was recorded during mid-ebb tide.							
	<u>Contract No. HY/2013/01</u>							
	As confirmed with the RSS and ET of Contract No. HY/2013/01, there were no marine transportation and no marine-based works performed under the Contract after January 2018. No site runoff within the Contract site was observed. All wastewater generated from construction site which potentially contained organic matter was collected by the registered collector. No organic matter discharge/accumulation at active works area was observed on 24 October 2018. Therefore, it is concluded that the exceedances were not related to the Contract.							
Possible reason for Action or Limit Level Non-compliance	<u>Contract No. HY/2013/02</u>							
	As confirmed with RSS, marine works were completed on 10 September 2017. ET of Contract No. HY/2013/02 confirmed that no organic matter discharge/accumulation was observed at active works areas on the date of exceedance. Therefore, it is concluded that the exceedances was not related to the Contract.							



	<p><u>Contract No. HY/2013/03</u></p> <p>During weekly site audits on 18 and 25 October 2018, ET of Contract No. HY/2013/03 confirmed the Contractor had provided workable and effective water quality mitigation measures. There was no marine transportation on the date of exceedance. As confirmed with the Environmental Officer and operation team of this Contract, no organic matter discharge/accumulation at active works areas was observed on the date of exceedance. The marine-based works in Box Culvert B were completed. The ET of Contract No. HY/2013/03 concluded that the captioned exceedance was not related to the construction site activities of the Contract.</p> <p><u>Contract No. HY/2013/04</u></p> <p>According to the Contractor of HY/2013/04, all marine-based segment deliveries were completed in January 2018 and no marine-based works were conducted under the contract on 24 October 2018. Furthermore, there was no visible observation of any discharge or accumulation of organic matter at the active works areas within HY/2013/04 site area on 24 October 2018.</p> <p>HY/2013/04 site shoreline interfacing with open waters was inspected during ET's regular weekly site inspections on 22 October 2018 (between 14:25 and 14:45) and 31 October 2018 (between 14:55 and 15:15). At both site inspections, it was observed that the silt curtain at Box Culvert D was installed properly, however the silt curtain at Box Culvert C was not reinstated. The Contractor was reminded to reinstate the silt curtain at Box Culvert C as soon as possible. There were no other observations in relation to the same shoreline.</p> <p>It was concluded that the exceedance was not due to HY/2013/04.</p> <p><u>Contract No. HY/2014/05</u></p> <p>This Contract did not involve any marine transportation or marine-based works. No site runoff within the Contract site was observed. Therefore, it is concluded that the exceedance was not related to the Contract.</p>
Actions taken / to be taken	<p><u>Contract No. HY/2013/01</u></p> <p>Although the exceedance was considered not due to HY/2013/01, the Contractor is reminded to implement all necessary water quality mitigation measures identified in the EM&amp;A Manual.</p> <p><u>Contract No. HY/2013/02</u></p> <p>Although the exceedance was considered not due to HY/2013/02, the Contractor is reminded to implement all necessary water quality mitigation measures identified in the EM&amp;A Manual.</p> <p><u>Contract No. HY/2013/03</u></p> <p>During weekly site audits on 18 and 25 October 2018, ET of Contract No. HY/2013/03 confirmed that the Contractor had provided workable and effective water quality mitigation measures.</p> <p><u>Contract No. HY/2013/04</u></p> <p>Actions were taken under Event and Action Plan (EAP):</p> <ol style="list-style-type: none"> <li>1. In situ measurement was repeated to confirm findings;</li> <li>2. After considering the above-mentioned investigation results, it appears that it was unlikely that the exceedance was attributed to active construction activities of this Contract;</li> <li>3. IEC, Contractor and ER were informed via email;</li> <li>4. Monitoring data, all plant, equipment and Contractor's working methods were</li> </ol>

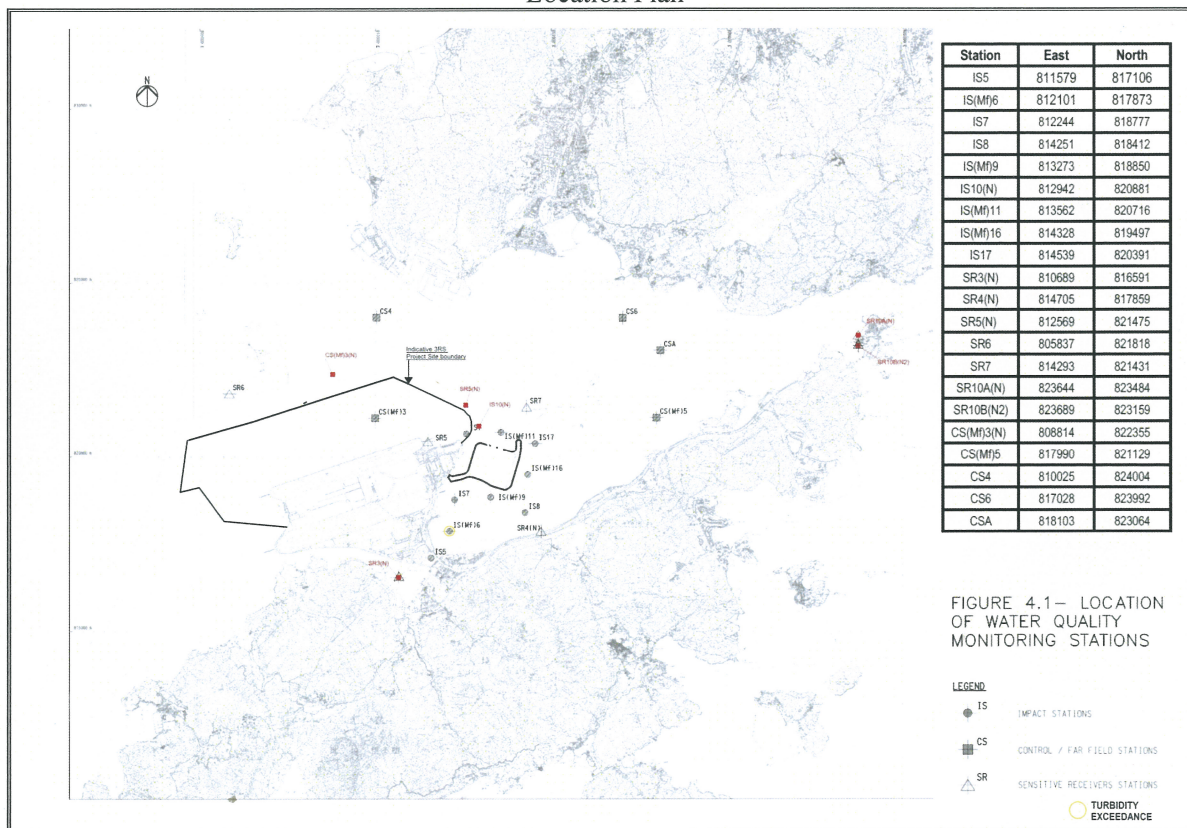
	<p>checked;</p> <p>5. Since it is considered that the exceedance was unlikely to be contract related, as such, Actions 5-7 under the EAP are not considered applicable.</p> <p>However, the Contractor was also reminded to implement environmental mitigation measures in accordance with Environmental Mitigation Implementation Schedule.</p> <p><u>Contract No. HY/2014/05</u></p> <p>Although the exceedance was considered not due to HY/2014/05, the Contractor is reminded to implement all necessary water quality mitigation measures identified in the EM&amp;A Manual.</p>
Remarks	<p>ET of HY/2013/04 notified the exceedance as follows:</p> <ul style="list-style-type: none"> <li>25 October 2018 (Notification No. 20181024_NOE_r0)</li> <li>20 November 2018 (Notification No. 20181024_NOE_r1)</li> </ul>

(Location Plan – please refer below)

Prepared by: Gary Chow  
 Designation: Environmental Team Leader (Contract No. HY/2013/04)  
 Signature: 

Date: 20 November 2018

### Location Plan



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

Contract	Contract No. HY/2013/04 HZMB HKBCF – Infrastructure Works Stage II (Southern Portion)							
Ref. No.	E095							
Date	23 November 2018							
Time (hh:mm)	See below							
Monitoring Location	IS(10)N, IS(Mf)11, SR7							
Parameter	Water Quality – Suspended Solids (in mg/L)							
Action Level	See below							
Limit Level	See below							
Measured Level	Action & Limit Level (AL & LL) / Measured Level:							
	Param.	Unit	Station	Depth	Action Level	Limit Level	Measurement at Mid-Ebb Tide	Measurement at Mid-Flood Tide
	SS	mg/L	IS10(N)	Depth Average	23.5 and 120% (i.e. 15.4 for mid-flood) of upstream control station's SS at the same tide of the same day	34.4 and 130% (i.e. 16.7 for mid-flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	10.6	25.8
	SS	mg/L	IS(Mf)11	Depth Average	23.5 and 120% (i.e. 15.4 for mid-flood) of upstream control station's SS at the same tide of the same day	34.4 and 130% (i.e. 16.7 for mid-flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	9.5	27.8
	SS	mg/L	SR7	Depth Average	23.5 and 120% (i.e. 15.4 for mid-flood) of upstream control station's SS at the same tide of the same day	34.4 and 130% (i.e. 16.7 for mid-flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	7.0	25.0
	Sampling Time:							
		Mid-Ebb	Mid-Flood					
	IS5	13:29	16:46					
	IS(Mf)6	13:20	16:54					
	IS7	13:14	17:01					
IS8	12:55	17:15						
IS(Mf)9	13:05	17:08						
IS10(N)	12:10	17:41						
IS(Mf)11	12:02	17:47						
IS(Mf)16	12:28	17:33						
IS17	12:22	17:39						
SR3(N)	13:36	16:43						
SR4(N)	12:48	17:20						
SR5(N)	12:15	17:35						
SR6	13:10	16:42						
SR7	11:51	17:56						
SR10A(N)	11:07	18:36						
SR10B(N2)	11:19	18:40						
Remarks:								
Bold means AL exceedance								
<u>Bold with underline</u> means LL exceedance								
Upstream control stations of mid-ebb tide: CS(Mf)3(N) and CS4								
Upstream control stations of mid-flood tide: CS(Mf)5, CS6 and CSA								
Possible reason for Action or Limit Level Non-compliance	On 23 November 2018, 3 no. AL exceedances of suspended solids at stations IS10(N), IS(Mf)11 and SR7 were recorded during mid-flood tide.							
	<u>Contract No. HY/2013/01</u> As confirmed with the RSS and ET of Contract No. HY/2013/01, there were no marine transportation and no marine-based works performed under the Contract							

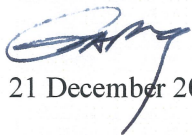
	<p>after January 2018. No site runoff within the Contract site was observed. All wastewater generated from construction site which potentially contained organic matter was collected by the registered collector. No organic matter discharge/accumulation at active works area was observed on the date of exceedance. Therefore, it is concluded that the exceedances were not related to the Contract.</p> <p><u>Contract No. HY/2013/02</u></p> <p>As confirmed with RSS, marine works were completed on 10 September 2017. ET of Contract No. HY/2013/02 confirmed that no organic matter discharge/accumulation was observed at active works areas on the date of exceedance. Therefore, it is concluded that the exceedances were not related to the Contract.</p> <p><u>Contract No. HY/2013/03</u></p> <p>As confirmed with RSS, there were no marine-based works performed under the contract after October 2018. ET of Contract No. HY/2013/03 confirmed that no organic matter discharge/accumulation was observed at the works areas on the date of exceedance. Therefore, it is concluded that the exceedances were not related to the Contract.</p> <p><u>Contract No. HY/2013/04</u></p> <p>According to the Contractor of HY/2013/04, all marine-based segment deliveries were completed in January 2018 and no marine-based works were conducted under the contract on 23 November 2018. Furthermore, there was no visible observation of any discharge or accumulation of organic matter at the active works areas within HY/2013/04 site area on 23 November 2018.</p> <p>HY/2013/04 site shoreline interfacing with open waters was inspected during ET's regular weekly site inspections on 19 November 2018 (between 14:50 and 15:00) and 28 November 2018 (between 14:20 and 15:00). On 19 November 2018, it was observed that the silt curtain at Box Culvert D was installed properly, however the silt curtain at Box Culvert C was not reinstated. The Contractor was reminded to reinstate the silt curtain at Box Culvert C as soon as possible. Subsequently, the silt curtain at Box Culvert C was removed and the observation was closed on 28 November 2018. There were no other observations (including the appearance of the open waters) in relation to the same shoreline on 19 and 28 November 2018.</p> <p>It was concluded that the exceedances were not due to HY/2013/04.</p> <p><u>Contract No. HY/2014/05</u></p> <p>This Contract did not involve any marine transportation or marine-based works. No site runoff within the Contract site was observed. Therefore, it is concluded that the exceedances were not related to the Contract.</p>
Actions taken / to be taken	<p><u>Contract No. HY/2013/01</u></p> <p>Although the exceedances were considered not due to HY/2013/01, the Contractor is reminded to implement all necessary water quality mitigation measures identified in the EM&amp;A Manual.</p> <p><u>Contract No. HY/2013/02</u></p> <p>Although the exceedances were considered not due to HY/2013/02, the Contractor is reminded to implement all necessary water quality mitigation measures identified in the EM&amp;A Manual.</p> <p><u>Contract No. HY/2013/03</u></p> <p>Although the exceedances were considered not due to HY/2013/03, the Contractor is reminded to implement all necessary water quality mitigation</p>



	<p>measures identified in the EM&amp;A Manual.</p> <p><u>Contract No. HY/2013/04</u></p> <p>Actions were taken under Event and Action Plan (EAP):</p> <ol style="list-style-type: none"><li>1. In situ measurement was repeated to confirm findings;</li><li>2. After considering the above-mentioned investigation results, it appears that it was unlikely that the exceedance was attributed to active construction activities of this Contract;</li><li>3. IEC, Contractor and ER were informed via email;</li><li>4. Monitoring data, all plant, equipment and Contractor's working methods were checked;</li><li>5. Since it is considered that the exceedance was unlikely to be contract related, as such, Actions 5-7 under the EAP are not considered applicable.</li></ol> <p>However, the Contractor was also reminded to implement environmental mitigation measures in accordance with Environmental Mitigation Implementation Schedule.</p> <p><u>Contract No. HY/2014/05</u></p> <p>Although the exceedances were considered not due to HY/2014/05, the Contractor is reminded to implement all necessary water quality mitigation measures identified in the EM&amp;A Manual.</p>
Remarks	<p>ET of HY/2013/04 notified the exceedances as follows:</p> <ul style="list-style-type: none"><li>• 5 December 2018 (Notification No. 20181123_NOE_r0)</li><li>• 6 December 2018 (Notification No. 20181123_NOE_r1)</li></ul>

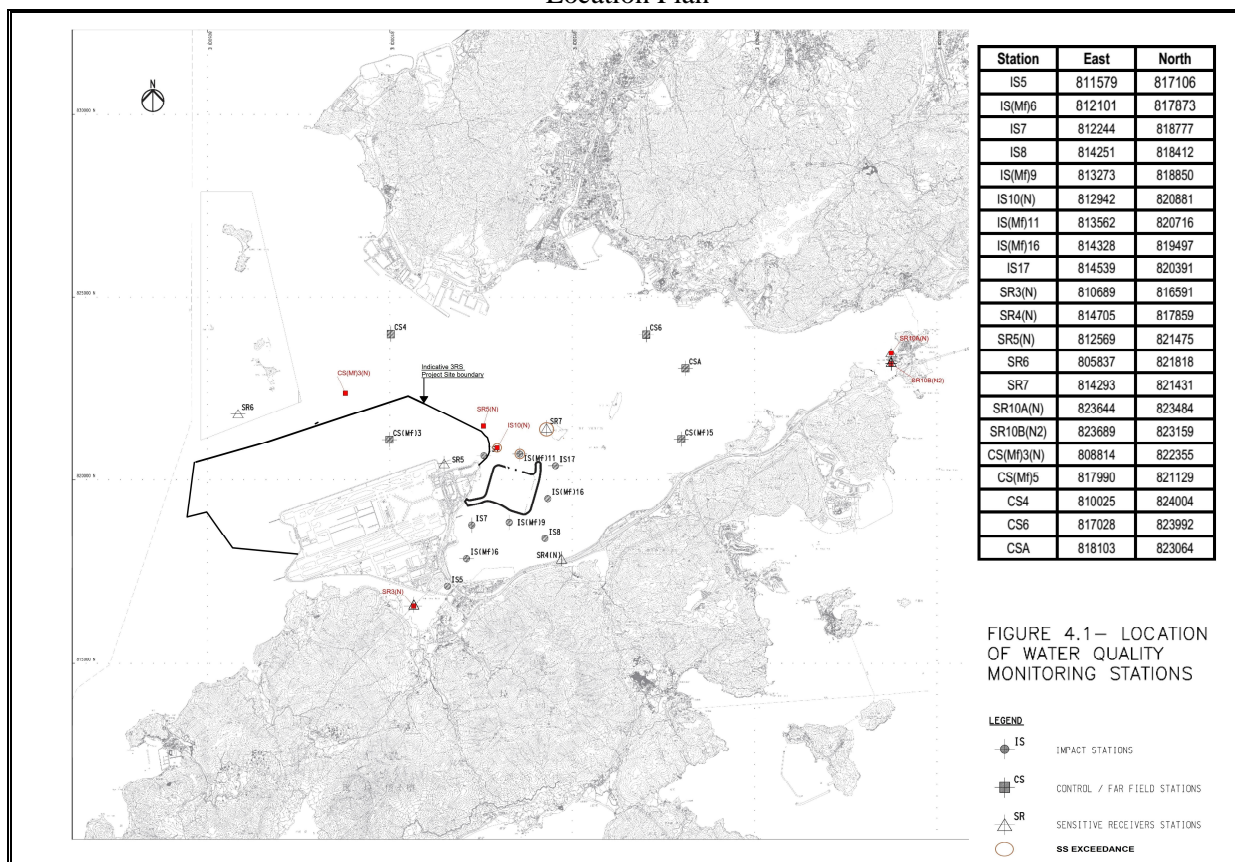
(Location Plan – please refer below)

Prepared by: Gary Chow  
Designation: Environmental Team Leader (Contract No. HY/2013/04)  
Signature:



Date: 21 December 2018

### Location Plan



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

Contract	Contract No. HY/2013/04 HZMB HKBCF – Infrastructure Works Stage II (Southern Portion)							
Ref. No.	E096							
Date	26 November 2018							
Time (hh:mm)	See below							
Monitoring Location	SR10A(N), SR10B(N2)							
Parameter	Water Quality – Suspended Solids (in mg/L)							
Action Level	See below							
Limit Level	See below							
Measured Level	Action & Limit Level (AL & LL) / Measured Level:							
	Param.	Unit	Station	Depth	Action Level	Limit Level	Measurement at Mid-Ebb Tide	Measurement at Mid-Flood Tide
	SS	mg/L	SR10A(N)	Depth Average	23.5 and 120% (i.e. 16.8 for mid-flood) of upstream control station's SS at the same tide of the same day	34.4 and 130% (i.e. 18.2 for mid-flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	9.6	24.7
	SS	mg/L	SR10B(N2)	Depth Average	23.5 and 120% (i.e. 16.8 for mid-flood) of upstream control station's SS at the same tide of the same day	34.4 and 130% (i.e. 18.2 for mid-flood) of upstream control station's SS at the same tide of the same day and 10mg/L for WSD Seawater intakes	10.5	23.7
	Sampling Time:							
		Mid-Ebb	Mid-Flood					
	IS5	13:38	10:16					
	IS(Mf)6	13:45	10:11					
	IS7	13:51	10:02					
	IS8	14:06	09:48					
IS(Mf)9	13:59	09:56						
IS10(N)	14:31	09:30						
IS(Mf)11	14:39	09:22						
IS(Mf)16	14:31	09:30						
IS17	14:40	09:23						
SR3(N)	13:30	10:22						
SR4(N)	14:14	09:43						
SR5(N)	14:19	09:36						
SR6	13:30	10:27						
SR7	15:07	09:15						
SR10A(N)	15:39	08:29						
SR10B(N2)	15:32	08:40						
	Remarks: Bold means AL exceedance Bold with underline means LL exceedance Upstream control stations of mid-ebb tide: CS(Mf)3(N) and CS4 Upstream control stations of mid-flood tide: CS(Mf)5, CS6 and CSA							
Possible reason for Action or Limit Level Non-compliance	On 26 November 2018, 2 no. AL exceedances of suspended solids at stations SR10A(N) and SR10B(N2) were recorded during mid-flood tide. <u>Contract No. HY/2013/01</u> As confirmed with the RSS and ET of Contract No. HY/2013/01, there were no marine transportation and no marine-based works performed under the Contract after January 2018. No site runoff within the Contract site was observed. All wastewater generated from construction site which potentially contained organic matter was collected by the registered collector. No organic matter discharge/accumulation at active works area was observed on the date of exceedance. Therefore, it is concluded that the exceedances were not related to the Contract.							

	<p><u>Contract No. HY/2013/02</u></p> <p>As confirmed with RSS, marine works were completed on 10 September 2017. ET of Contract No. HY/2013/02 confirmed that no organic matter discharge/accumulation was observed at active works areas on the date of exceedance. Therefore, it is concluded that the exceedances were not related to the Contract.</p> <p><u>Contract No. HY/2013/03</u></p> <p>As confirmed with RSS, there were no marine-based works performed under the contract after October 2018. ET of Contract No. HY/2013/03 confirmed that no organic matter discharge/accumulation was observed at the works areas on the date of exceedance. Therefore, it is concluded that the exceedances were not related to the Contract.</p> <p><u>Contract No. HY/2013/04</u></p> <p>According to the Contractor of HY/2013/04, all marine-based segment deliveries were completed in January 2018 and no marine-based works were conducted under the contract on 26 November 2018. Furthermore, there was no visible observation of any discharge or accumulation of organic matter at the active works areas within HY/2013/04 site area on 26 November 2018.</p> <p>HY/2013/04 site shoreline interfacing with open waters was inspected during ET's regular weekly site inspections on 19 November 2018 (between 14:50 and 15:00) and 28 November 2018 (between 14:20 and 15:00). On 19 November 2018, it was observed that the silt curtain at Box Culvert D was installed properly, however the silt curtain at Box Culvert C was not reinstated. The Contractor was reminded to reinstate the silt curtain at Box Culvert C as soon as possible. Subsequently, the silt curtain at Box Culvert C was removed and the observation was closed on 28 November 2018. There were no other observations (including the appearance of the open waters) in relation to the same shoreline on 19 and 28 November 2018.</p> <p>It was concluded that the exceedances were not due to HY/2013/04.</p> <p><u>Contract No. HY/2014/05</u></p> <p>This Contract did not involve any marine transportation or marine-based works. No site runoff within the Contract site was observed. Therefore, it is concluded that the exceedances were not related to the Contract.</p>
Actions taken / to be taken	<p><u>Contract No. HY/2013/01</u></p> <p>Although the exceedances were considered not due to HY/2013/01, the Contractor is reminded to implement all necessary water quality mitigation measures identified in the EM&amp;A Manual.</p> <p><u>Contract No. HY/2013/02</u></p> <p>Although the exceedances were considered not due to HY/2013/02, the Contractor is reminded to implement all necessary water quality mitigation measures identified in the EM&amp;A Manual.</p> <p><u>Contract No. HY/2013/03</u></p> <p>Although the exceedances were considered not due to HY/2013/03, the Contractor is reminded to implement all necessary water quality mitigation measures identified in the EM&amp;A Manual.</p> <p><u>Contract No. HY/2013/04</u></p> <p>Actions were taken under Event and Action Plan (EAP):</p> <ol style="list-style-type: none"> <li>1. In situ measurement was repeated to confirm findings;</li> <li>2. After considering the above-mentioned investigation results, it appears that it</li> </ol>



	<p>was unlikely that the exceedance was attributed to active construction activities of this Contract;</p> <p>3. IEC, Contractor and ER were informed via email;</p> <p>4. Monitoring data, all plant, equipment and Contractor's working methods were checked;</p> <p>5. Since it is considered that the exceedance was unlikely to be contract related, as such, Actions 5-7 under the EAP are not considered applicable.</p> <p>However, the Contractor was also reminded to implement environmental mitigation measures in accordance with Environmental Mitigation Implementation Schedule.</p> <p><u>Contract No. HY/2014/05</u></p> <p>Although the exceedances were considered not due to HY/2014/05, the Contractor is reminded to implement all necessary water quality mitigation measures identified in the EM&amp;A Manual.</p>
Remarks	<p>ET of HY/2013/04 notified the exceedances as follows:</p> <ul style="list-style-type: none"><li>• 6 December 2018 (Notification No. 20181126_NOE_r0 &amp; 20181126_NOE_r1)</li></ul>

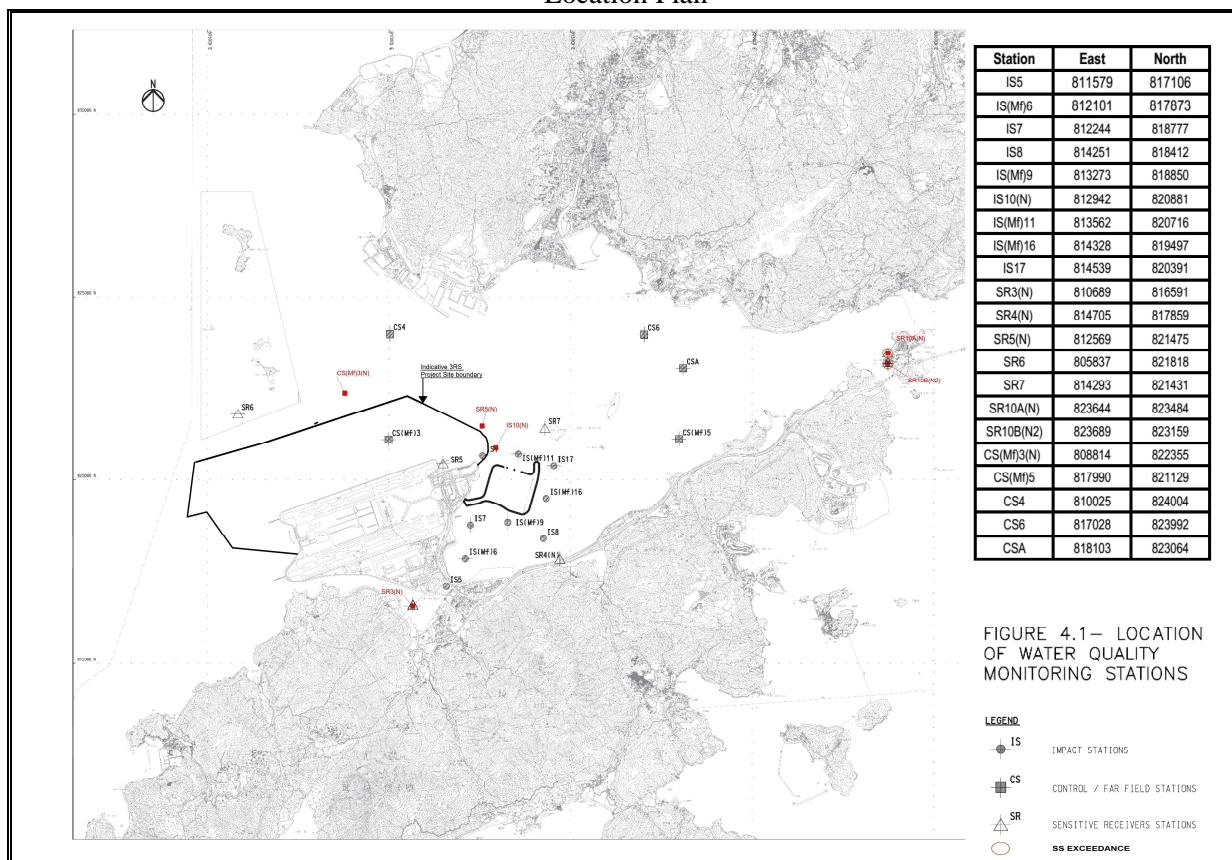
(Location Plan – please refer below)

Prepared by: Gary Chow  
Designation: Environmental Team Leader (Contract No. HY/2013/04)  
Signature:



Date: 21 December 2018

### Location Plan



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

Contract	Contract No. HY/2013/04 HZMB HKBCF – Infrastructure Works Stage II (Southern Portion)		
Ref. No.	E100		
Date	September – November 2018 (referred to as the “reporting period”)		
Time (hh:mm)	N/A		
Monitoring Location	Northeast Lantau (NEL) & Northwest Lantau (NWL)		
Parameter	Ecology – Chinese White Dolphin (CWD)		
Action Level	The Action and Limit Levels of CWD monitoring extracted from the enhanced Event and Action Plan for CWD Monitoring (as accepted by EPD on 7 May 2013) are reproduced below.		
Limit Level			
Measured Level	Action & Limit Levels (AL & LL):		Monitoring Results:
	North Lantau Social Cluster		for the Monitoring Period
	Action Level (AL)	Limit Level (LL)	
	NEL	STG < 4.2 & ANI < 15.5	NEL: (STG < 2.4 & ANI < 8.9) and STG = 0 & ANI = 0
	NWL	STG < 6.9 & ANI < 31.3	NWL: (STG < 3.9 & ANI < 17.9) & ANI = 3.0 ± 3.89
Remarks: 1. STG means quarterly encounter rate of number of dolphin sightings 2. ANI means quarterly encounter rate of total number of dolphins 3. For North Lantau Social Cluster, AL will be triggered if <u>either NEL or NWL</u> falls below the criteria; LL will be triggered if <u>both NEL and NWL</u> fall below the criteria 4. Bold means AL exceedance 5. Bold with underline means LL exceedance			
Possible reason for Action or Limit Level Non-compliance	<b>(a) Causes of Exceedance</b> <ul style="list-style-type: none"> <li>During CWD monitoring in the reporting period, no adverse impact from the activities of HZMB HKBCF project on dolphin was noticeable from general observations.</li> <li>After review of all available and relevant data, including the raw data and analyses of other parameters included in the EM&amp;A, no significant variation is detected in key environmental parameters.</li> <li>As confirmed with Engineer’s Representative, there were no marine transportation and no marine-based works performed under Contract Nos. HY/2013/01, HY/2013/02 and HY/2013/03 in September–November 2018.</li> <li>Also, according to the Contractor of HY/2013/04, all marine-based segment deliveries were completed in January 2018 and no marine-based works were conducted under the contract in September–November 2018. Moreover, the localised silt curtain at Box Culvert C under HY/2013/04 were removed on 17 November 2018.</li> <li>Current mitigation measures were being upheld. Dolphin Watching Plans under Contract Nos. HY/2013/01 and HY/2013/04 were implemented in September–November 2018. There was no failure or reduction of dolphin-specific mitigation measures.</li> <li>It was concluded that the HZMB construction work is one of the contributing factors affecting the dolphins. It was also concluded the contribution of impacts due to individual HZMB contracts and processes cannot be separated from the other activities within the dolphin habitat.</li> </ul>		



<p>Actions taken / to be taken</p>	<p><b>(b) Action required under the action plan</b>          Please refer to the corresponding Event and Action Plan</p> <p><b>(c) Action taken under the action plan</b></p> <p><b>1) Statistical data analysis has been repeated to confirm findings</b>          It is noted that monitoring data collected in September 2018 through HZMB HKBCF Contract No. HY/2013/01 and in October and November 2018 through HZMB HLKR Contract No. HY/2011/03.          A two-way ANOVA with repeated measures and unequal sample size was conducted to examine whether there were any significant differences in the average encounter rates between the baseline and impact monitoring periods. The two variables that were examined included the two periods (baseline and impact phases) and two locations (NEL and NWL).          For the comparison between the baseline period and the present quarter, the p-values for the differences in average dolphin encounter rates of STG and ANI were 0.0029 and 0.0146 respectively. If the alpha value is set at 0.05, significant differences were detected between the baseline and present quarter in both the average dolphin encounter rates of STG and ANI.</p> <p><b>2) All available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&amp;A have been reviewed</b>          The AFCD monitoring data during September to November 2018 has been reviewed by the dolphin specialist. During the same quarter, no dolphin was sighted from 172.60 km of survey effort on primary lines in NEL, while nine groups of 22 dolphins were sighted from 216.88 km of survey effort on primary lines in NWL. This review has confirmed that the low occurrence of dolphins reported by the monitoring surveys in autumn 2018 in NEL and NWL survey area is accurate.          Furthermore, for water quality monitoring during this reporting period, the following exceedances were recorded and investigated:</p> <ul style="list-style-type: none"> <li>During September 2018, 184 exceedances of water quality (consisting of 153 Action Level and 29 Limit Level exceedances of dissolved oxygen and two Action Level exceedances of suspended solids) were recorded. <b>Following investigations, it was concluded that the exceedances were not related to the HZMB HKBCF project.</b></li> <li>During October 2018, two exceedances of water quality (consisting of one Action Level exceedance of suspended solids and one Action Level exceedance of turbidity) were recorded. <b>Following investigations, it was concluded that the exceedances were not related to the HZMB HKBCF project.</b></li> <li>During November 2018, five exceedances of water quality (all Action Level exceedances of suspended solids) were recorded. <b>Following investigations, it was concluded that the exceedances were not related to the HZMB HKBCF project.</b></li> </ul>
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	<p><b>3) Identification of source of impact was carried out</b></p> <p>During this reporting period of dolphin monitoring, no adverse impact on dolphin from the works activities of HZMB HKBCF project was noticeable from general observations. Nevertheless, dolphin mitigation measures were being upheld and the Dolphin Watching Plan was implemented from the start of the works of the Project.</p> <p>It is also noted that another ongoing project has expanded extensively in scale and now occupies considerable areas of NWL; it has prevented the successful completion of some of the transect lines and is in addition to the existing pressures the dolphins faced in the Lantau habitat before the HZMB development started (e.g. boat traffic, habitat degradation, pollution, competition with fisheries). The same project has already been noted as influencing a large part of NWL, which dolphins seem to have entirely vacated.</p> <p>Investigation reports into previous dolphin monitoring exceedances prepared by the ET for Contract No. HY/2010/02 had concluded that there were ongoing construction works, both Project related and not, which were known to impact dolphins. While no adverse impact was observed from HZMB HKBCF activities on dolphins during this reporting period, the long-term impacts of these works cannot be assessed although expanding the scope of monitoring areas will provide better data on impacts outside the NEL and NWL zones.</p> <p><b>4) The IEC, ER and Contractor have been informed of findings</b></p> <p>ET of HY/2013/04 notified the exceedance as follows:</p> <ul style="list-style-type: none"> <li>• 18 April 2019 (Notification No. 201809-201811D_NOE)</li> <li>• 20 May 2019 (Notification No. 201809-201811D_NOE_r1)</li> </ul> <p><b>5) Monitoring data have been checked</b></p> <p>See Point (2) above.</p> <p><b>6) Repeated review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary</b></p> <p>Site inspection of the silt curtain integrity was conducted during weekly site inspection. The appropriate mitigation monitoring was in place depending on site activities (i.e., Dolphin Exclusion Zone (DEZ)/Dolphin Watching Plan (DWP) for silt curtain deployment and all other Project activities, respectively).</p> <p>After investigation, there was no evidence that indicated that the reduced number of dolphins in NWL and NEL was related solely to Project works. It was also concluded that the contribution of impacts due to the HZMB works as a whole (or individual contracts) cannot be quantified nor separate from the other stress factors.</p> <p><b>(d) ET's conclusions and recommendations for mitigation</b></p> <p>Current mitigation measures for CWD were implemented fully, and the Contractor was reminded to consistently implement existing mitigation measures.</p> <p>Investigation reports into previous dolphin monitoring exceedances prepared by the ET for Contract No. HY/2010/02 have noted that the current monitoring works</p>
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	<p>under the EM&amp;A programmes have already provided a high level of monitoring effort, that additional monitoring in the monitoring areas was not considered necessary, and that existing data can be reviewed and alternative analytical methods can be explored to determine any new insight to the dolphin distribution pattern.</p> <p><b>(e) Contractor's actions to implement the mitigation</b></p> <ul style="list-style-type: none"> <li>Although this exceedance was considered not solely caused by HZMB HKBCF Project, the Contractor is reminded to fully implement all relevant mitigation measures identified in the EM&amp;A Manual.</li> <li>It was recommended that the marine works of HZMB projects should be accelerated and completed as soon as possible so as to reduce the overall duration of impacts and allow the dolphin population to recover as early as possible.</li> </ul>
Remarks	-

(Location Plan – please refer below)

Prepared by: Gary Chow  
Designation: Environmental Team Leader (Contract No. HY/2013/04)  
Signature: 

Date: 19 June 2019

Location Plan

