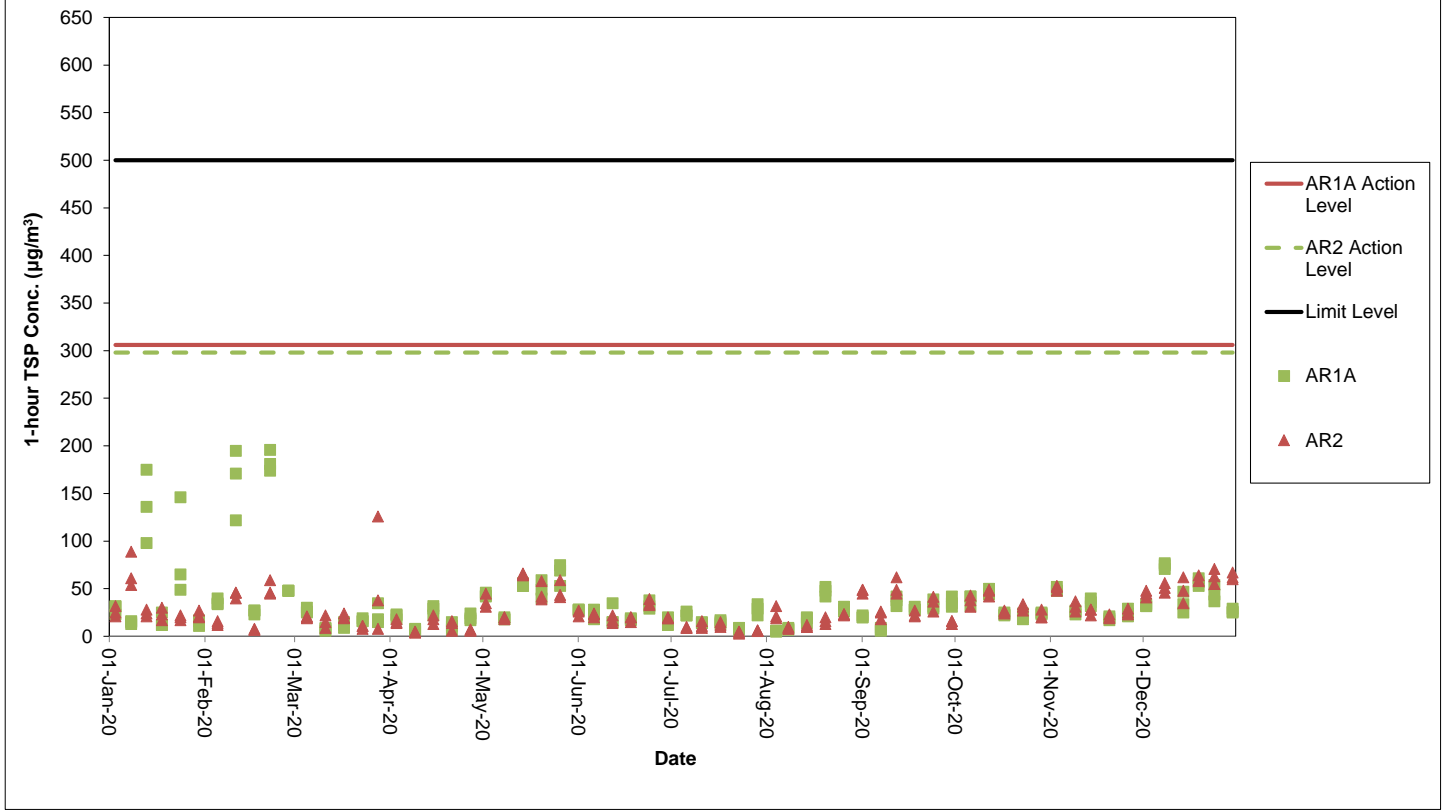


## **Appendix D. Monitoring Results**

## **Air Quality Monitoring Results**

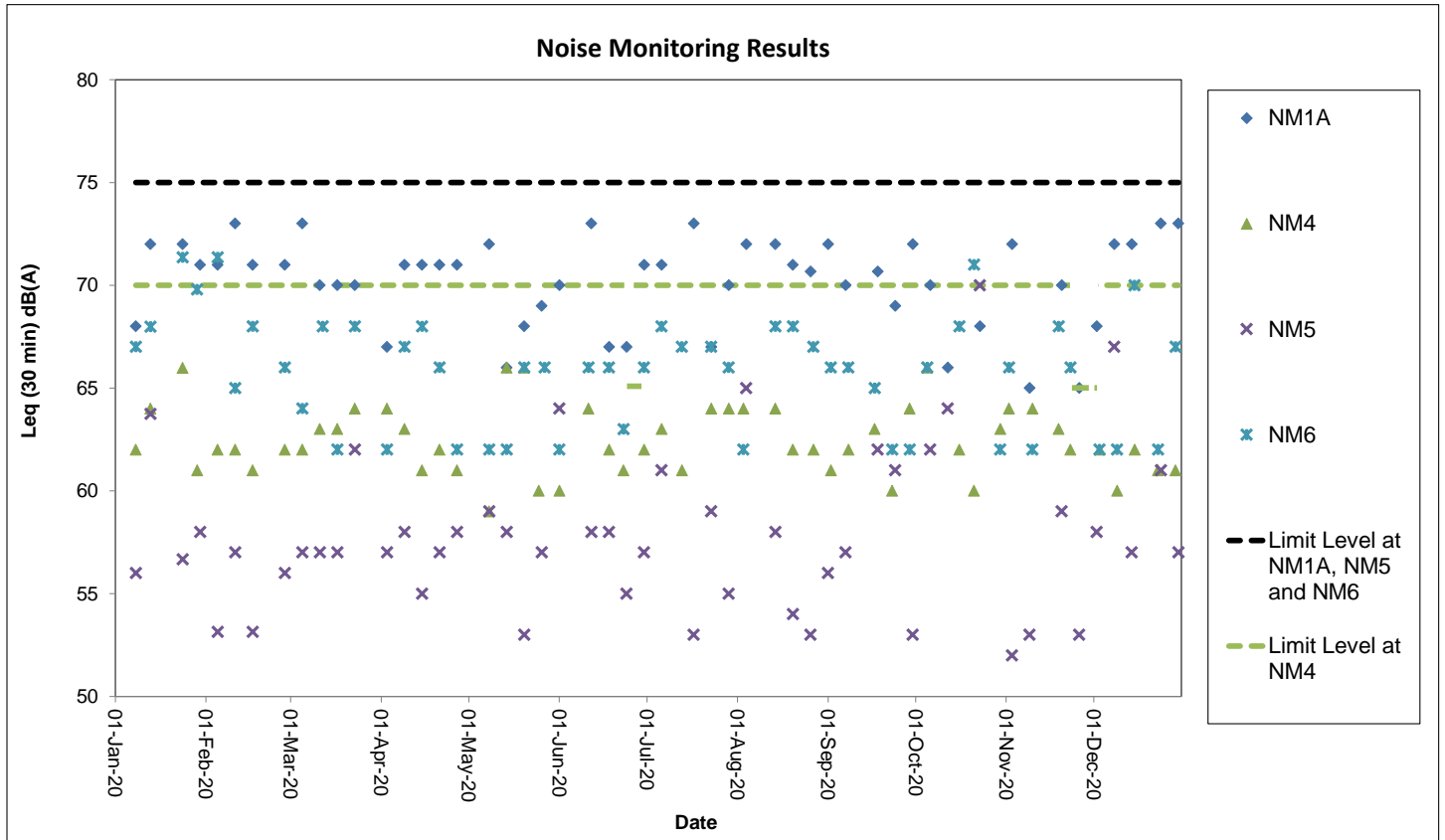
### Air Quality Monitoring Results



**Notes**

1. The key activities of the Project carried out in the reporting period included reclamation works and land-based works. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights. Land-based works on existing airport island involved mainly airfield works, foundation and substructure works for Terminal 2 expansion, modification and tunnel work for APM and BHS, and preparation work for utilities, with activities including site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, piling, and excavation works.
2. General weather condition during monitoring ranged from sunny to rainy. Detailed meteorological conditions should be referred to Table 2.3 of this Report and corresponding Monthly EM&A Reports.
3. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.

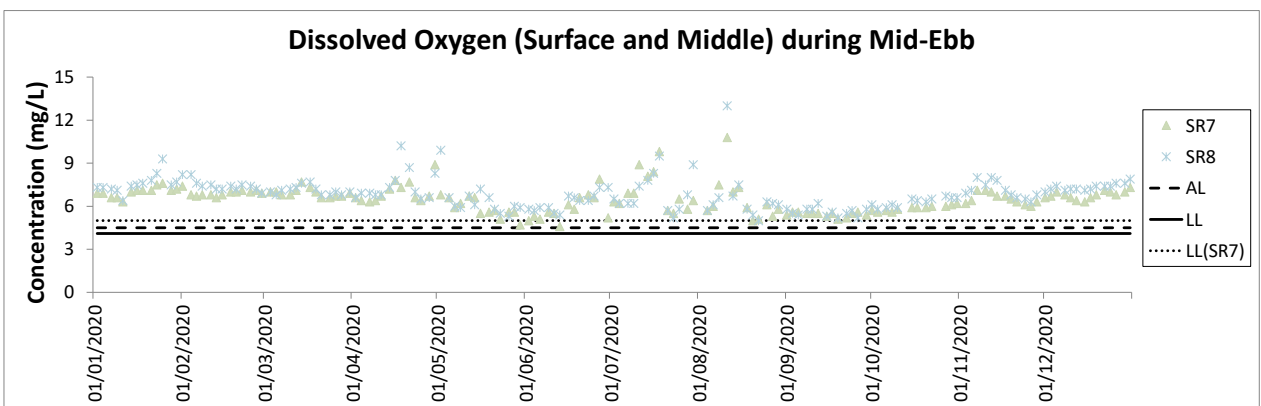
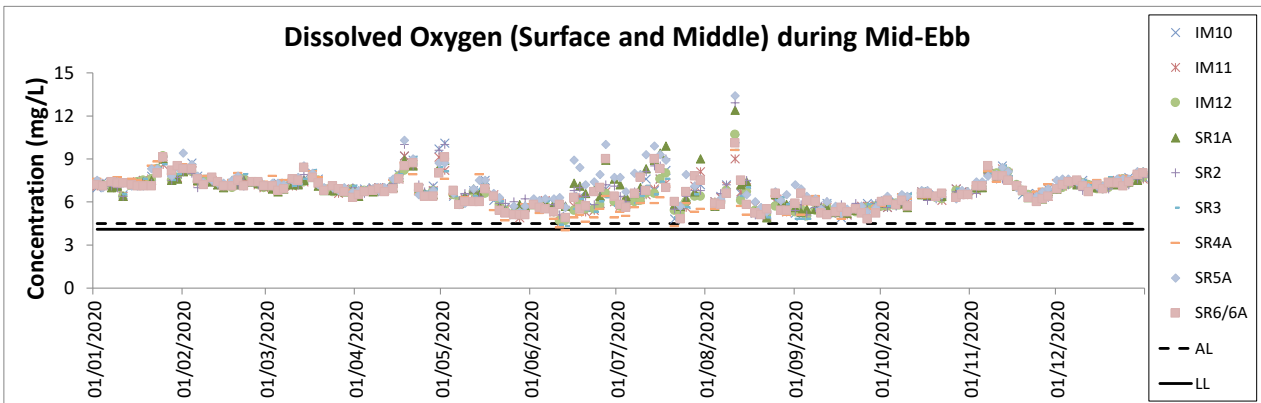
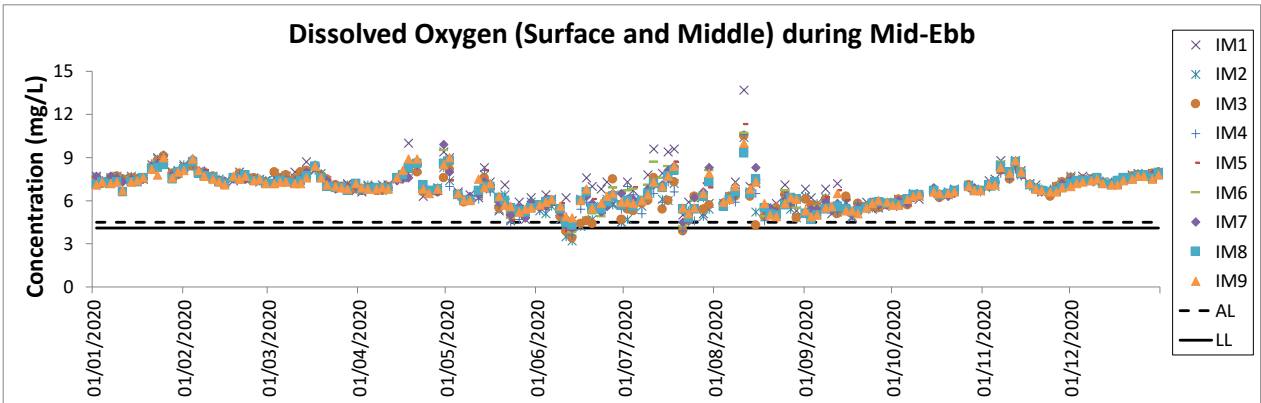
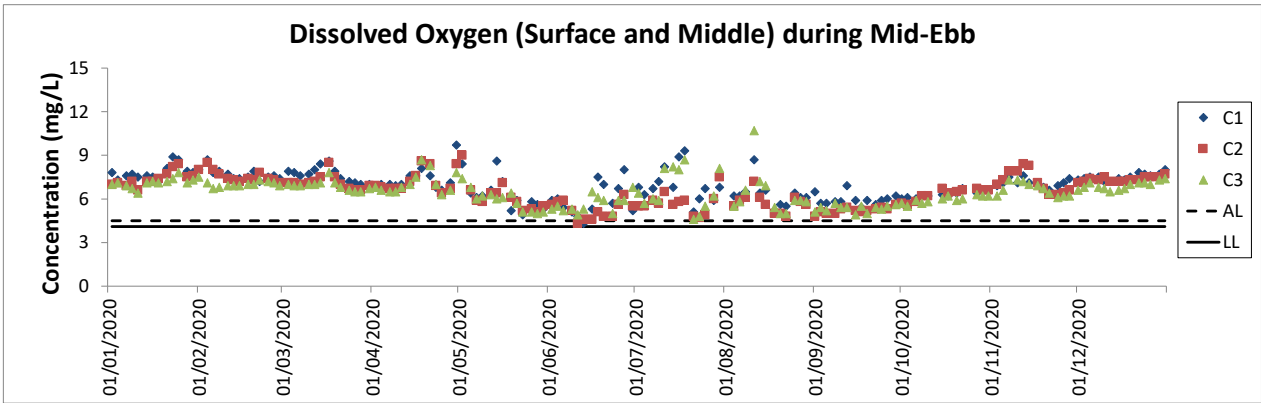
# Noise Monitoring Results



**Notes**

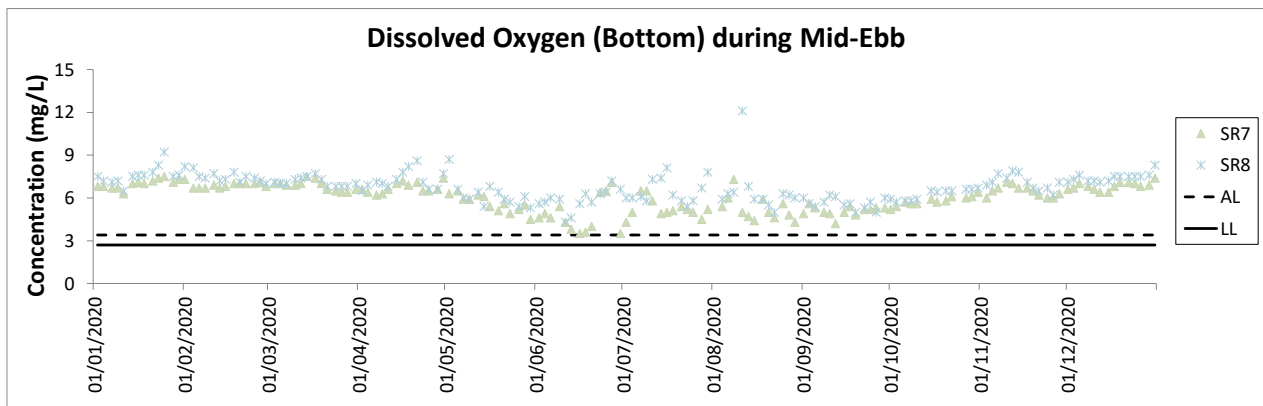
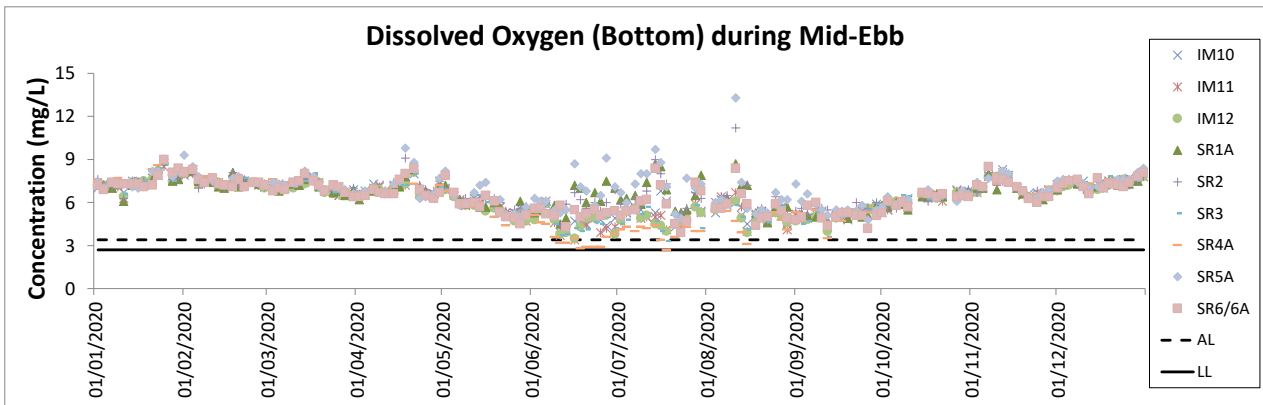
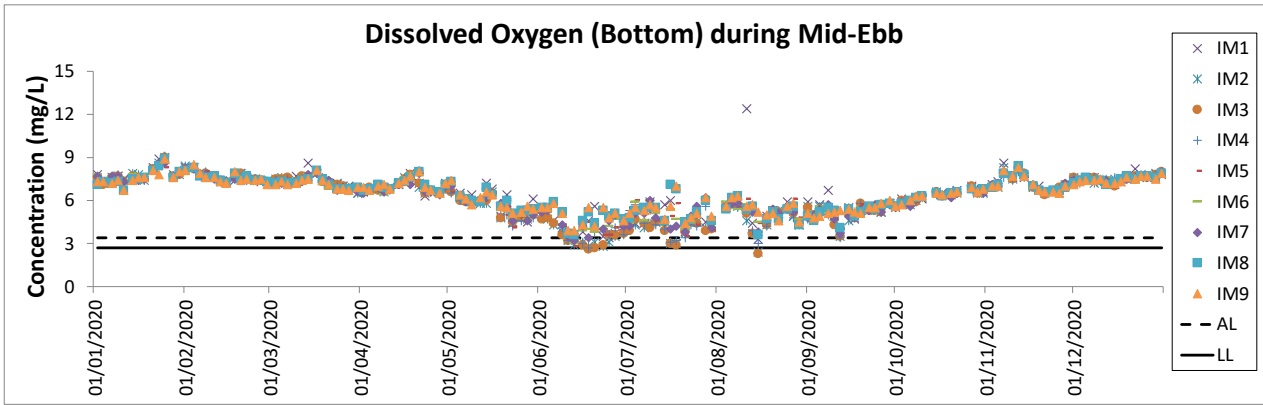
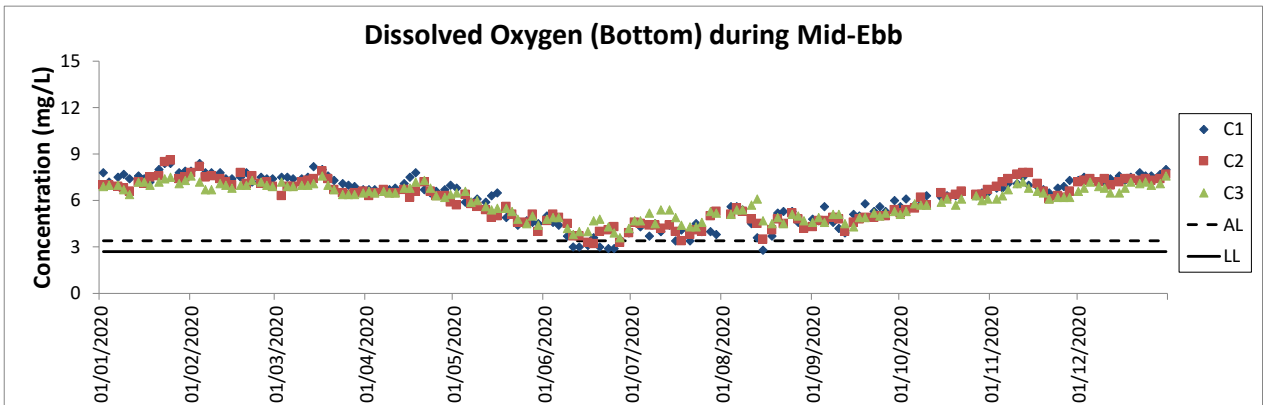
1. The Limit Level is reduced to 70dB(A) for school and 65db(A) during school examination period at NM4. School examination took place from 22 to 23 June and 23 to 27 November during this reporting period.
2. Noise monitoring at NM3A was temporarily suspended starting from 1 Sep 2018 and would be resumed with the completion of the Tung Chung East Development.
3. The key activities of the Project carried out in the reporting period included reclamation works and land-based works. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights. Land-based works on existing airport island involved mainly airfield works, foundation and substructure works for Terminal 2 expansion, modification and tunnel work for APM and BHS, and preparation work for utilities, with activities including site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, piling, and excavation works.
4. General weather condition during monitoring ranged from sunny to drizzle. Detailed meteorological conditions should be referred to Table 2.6 of this Report and corresponding Monthly EM&A Reports.
5. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.

# **Water Quality Monitoring Results**



**Notes:**

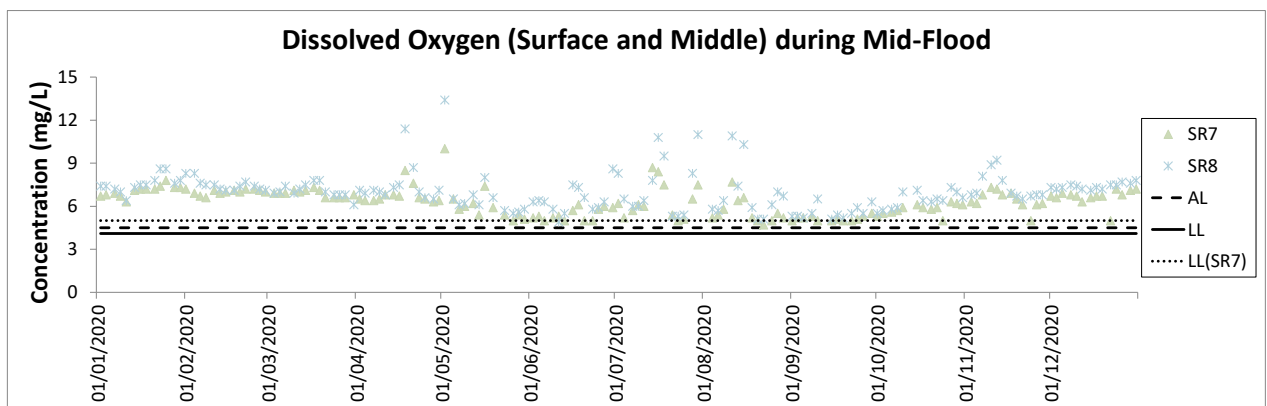
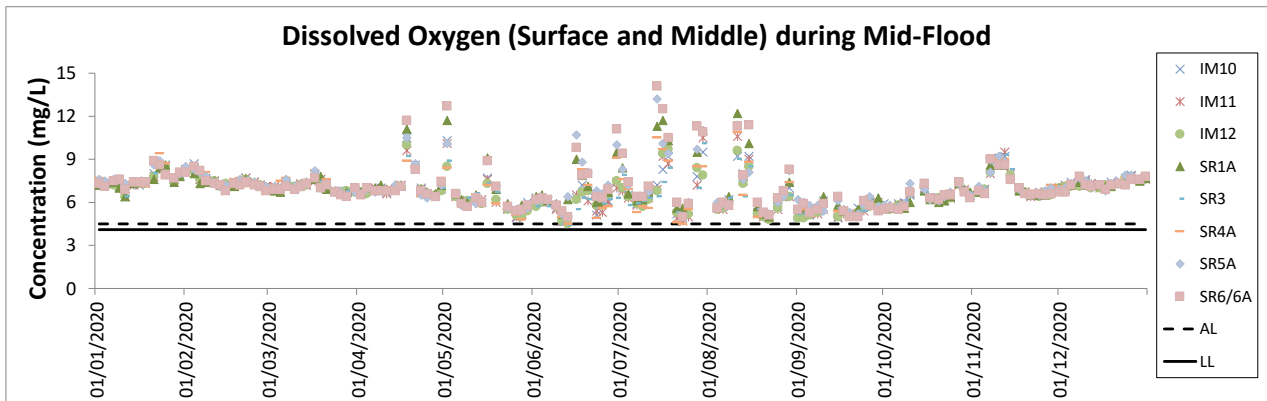
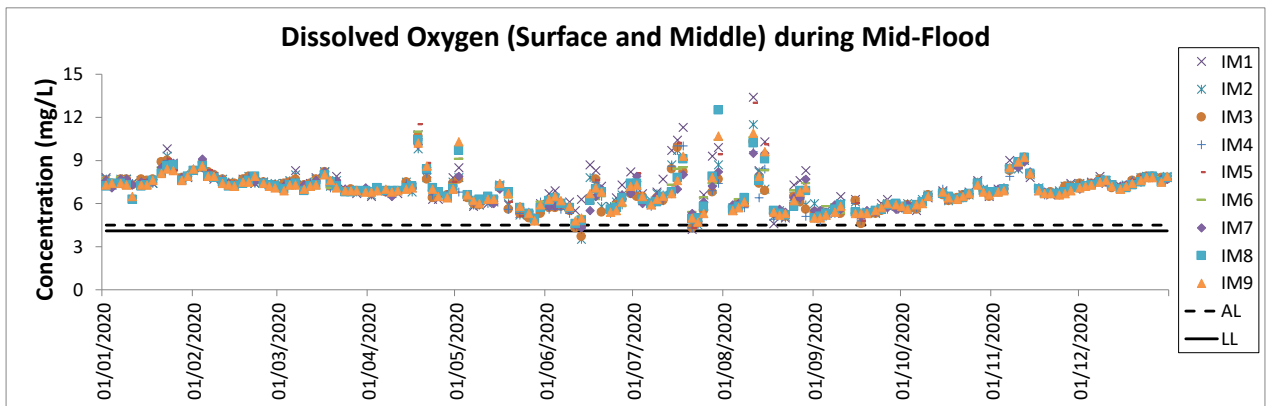
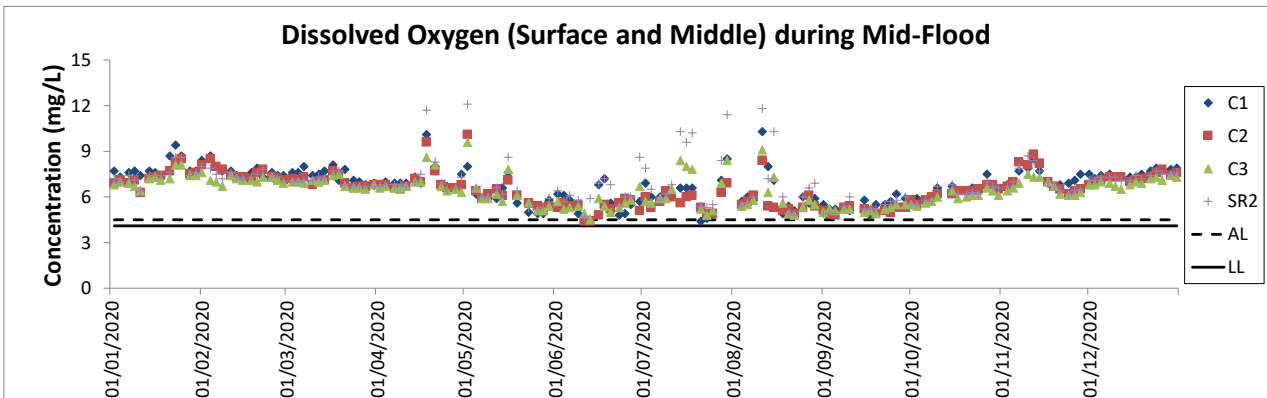
1. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
2. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
3. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.



**Notes:**

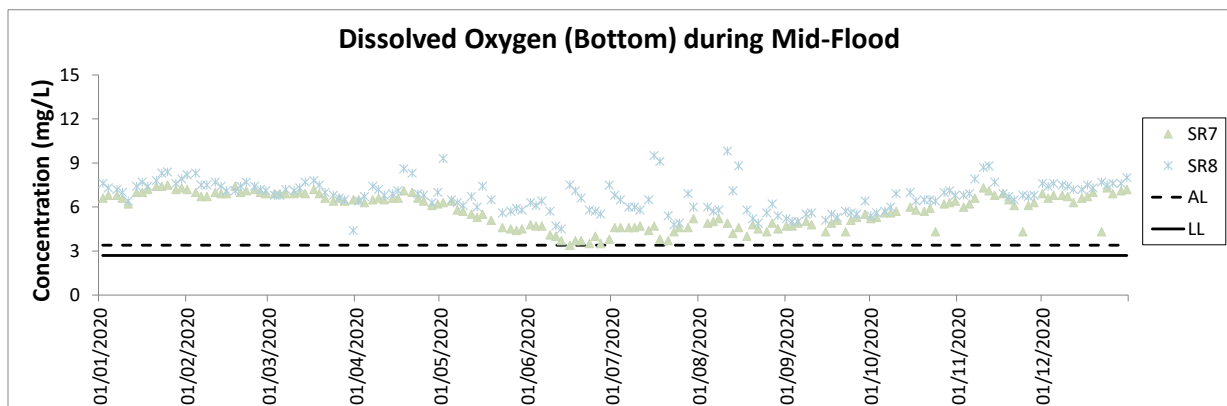
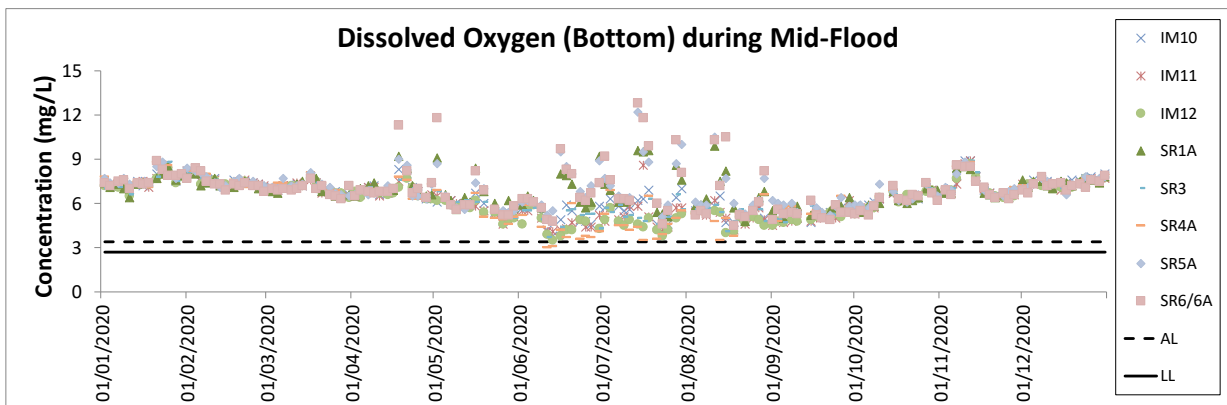
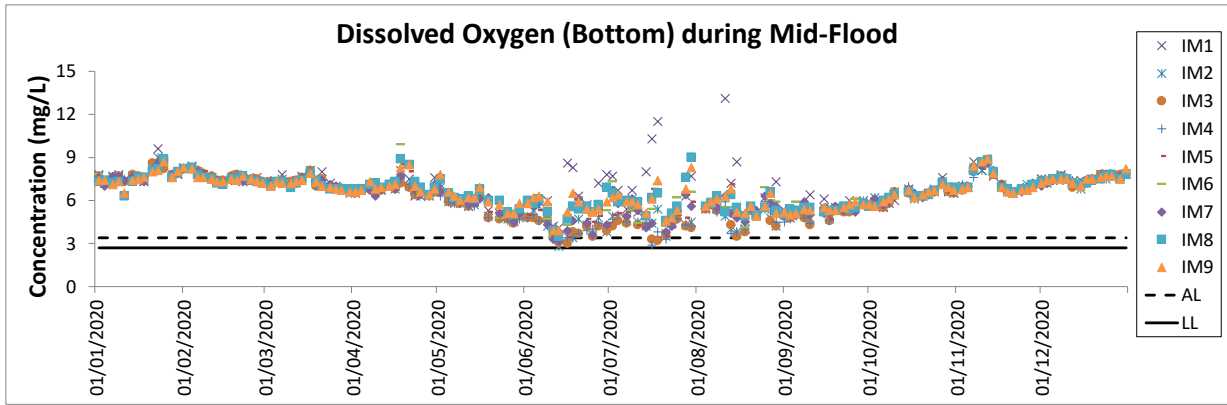
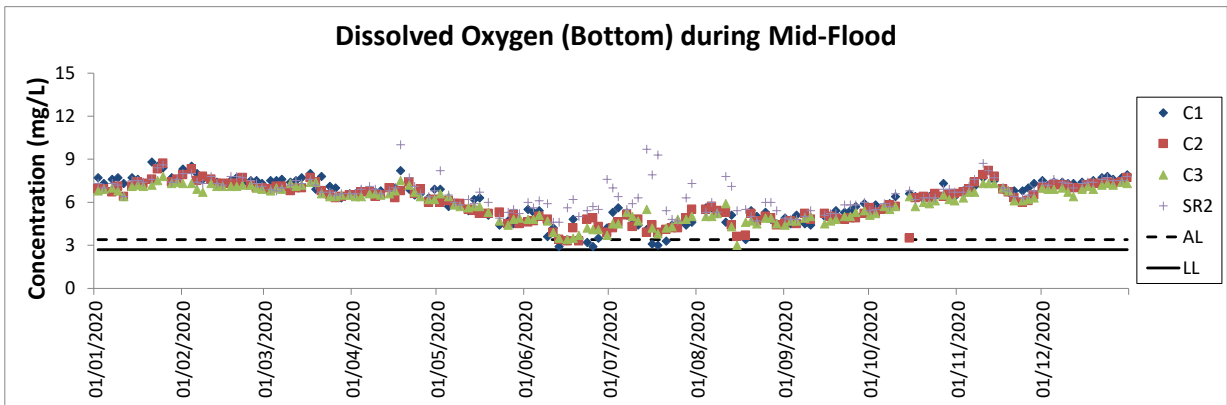
1. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
2. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
3. QA/QC requirements as stipulated in the EM&A Manual was carried out during measurement.





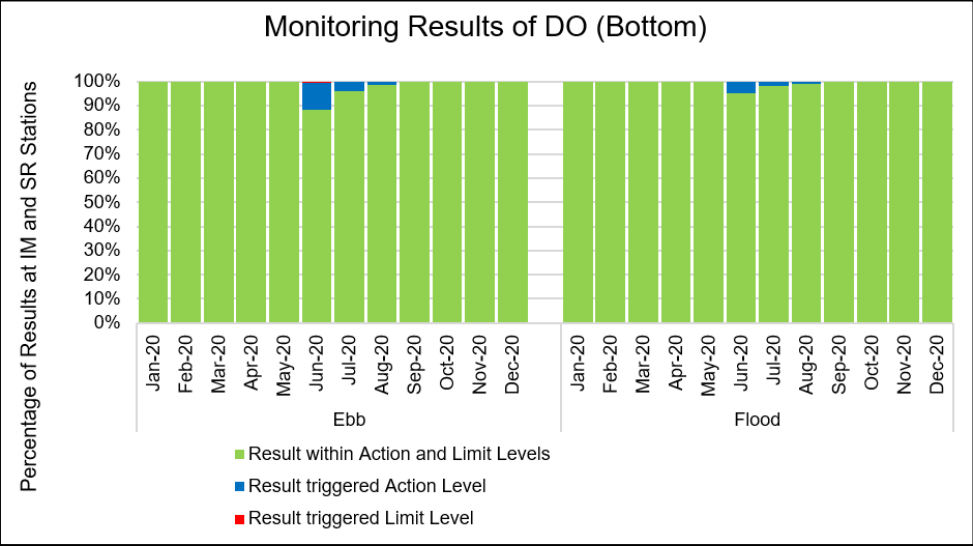
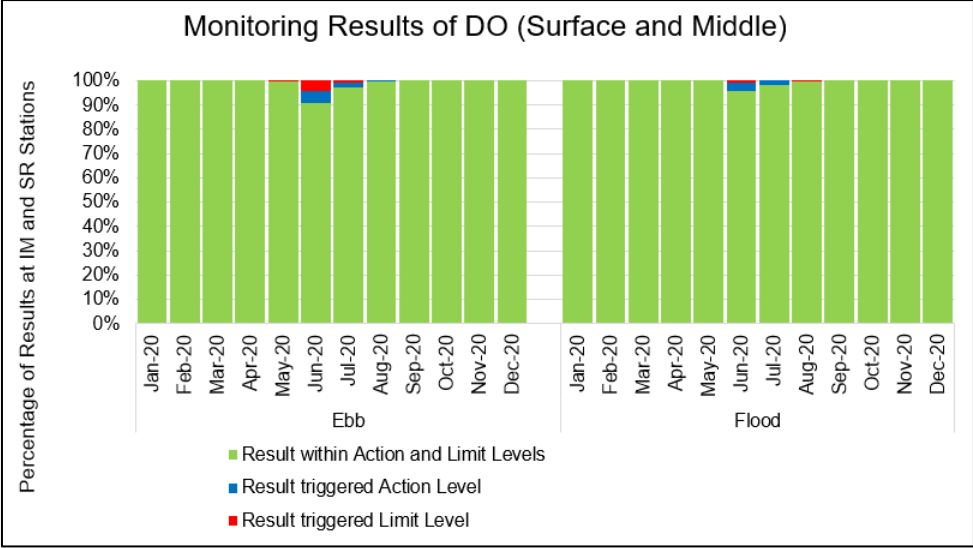
**Notes:**

1. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
2. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
3. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.

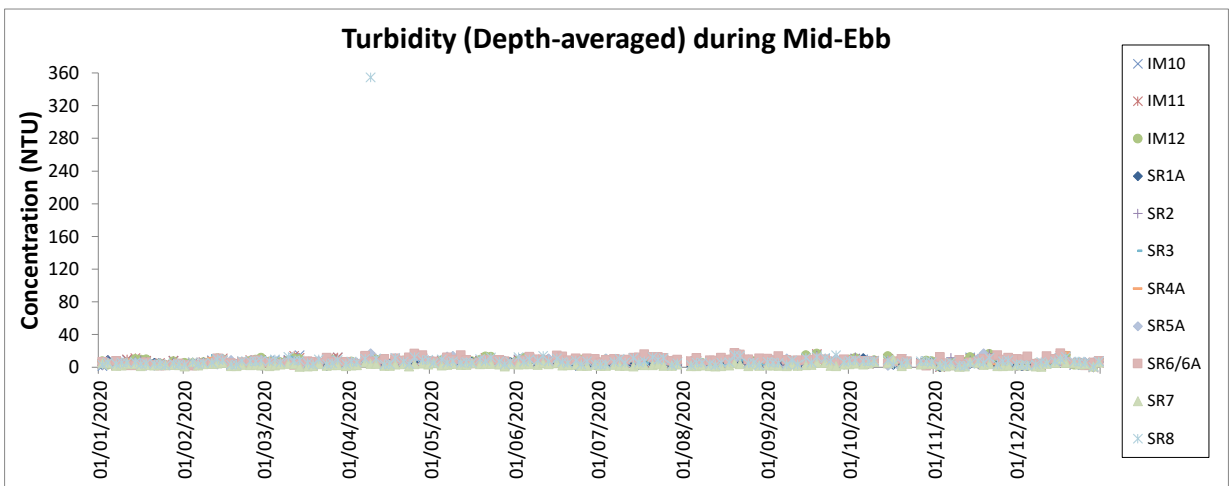
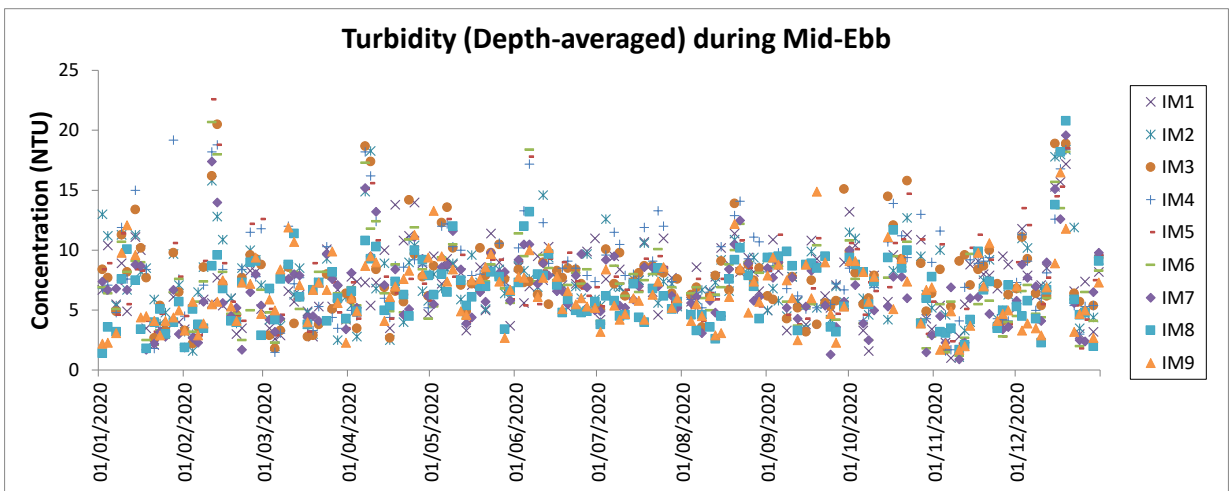
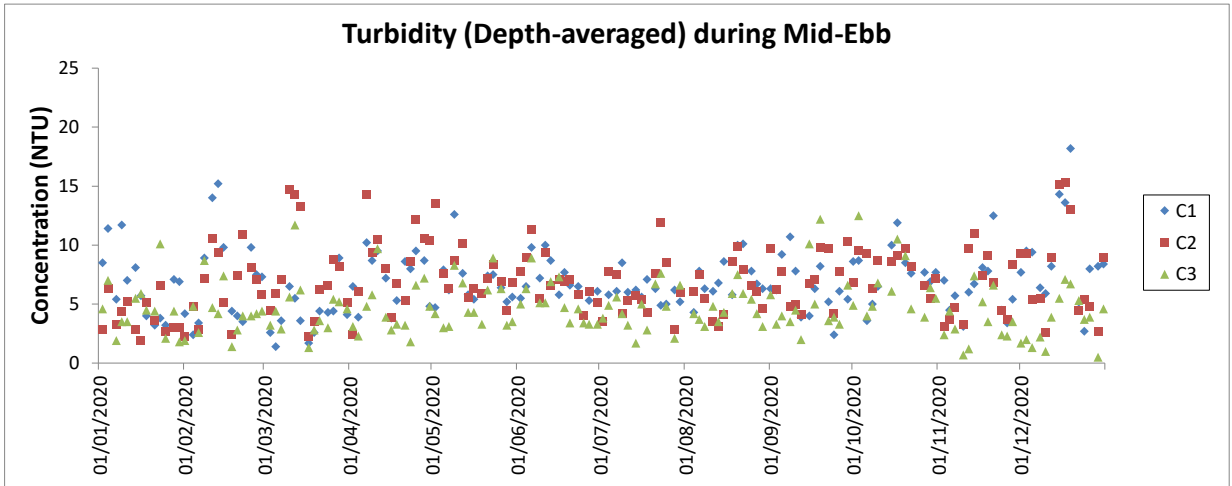


**Notes:**

1. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
2. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
3. QA/QC requirements as stipulated in the EM&A Manual was carried out during measurement.

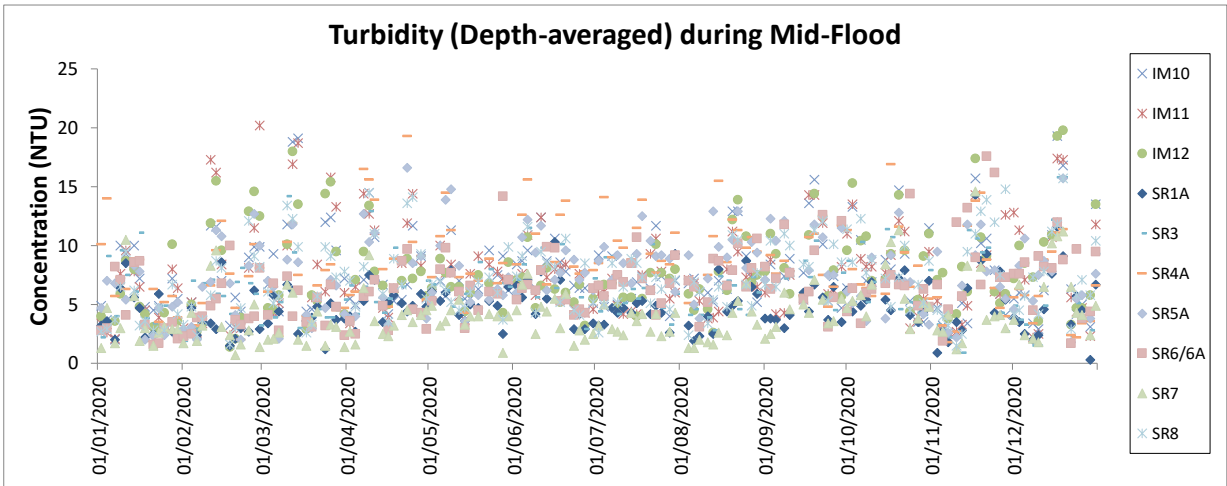
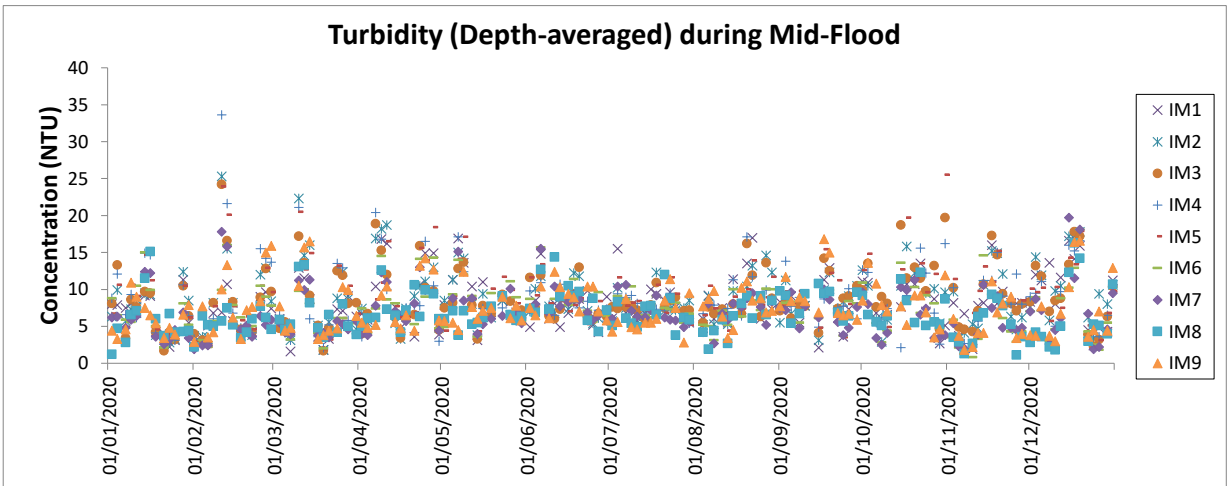
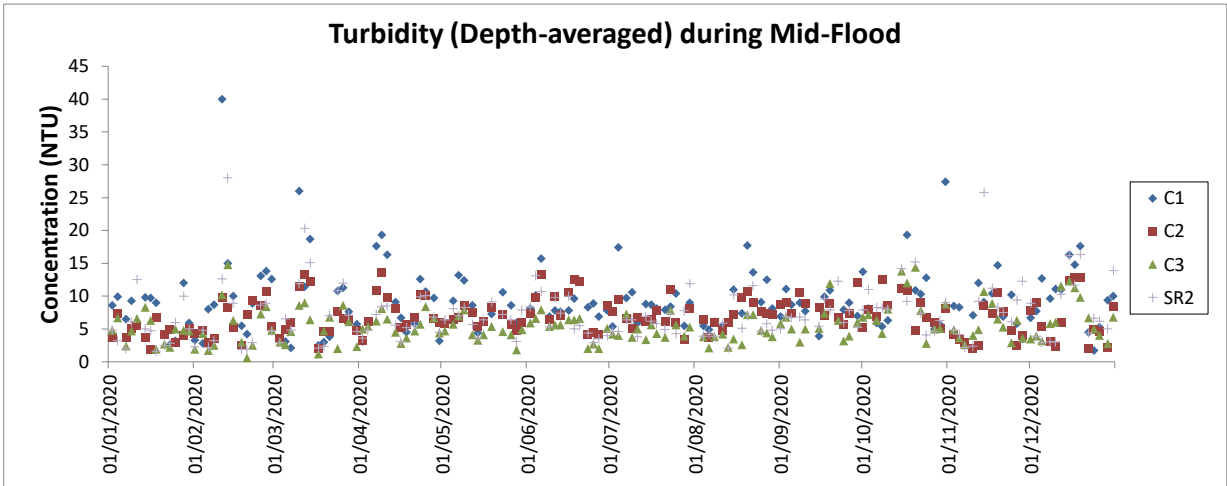


During the reporting period, 0.8% of the DO monitoring results at surface and middle water level and 1% of the DO monitoring results at bottom water level triggered the corresponding Action or Limit Level. All results triggering the corresponding Action or Limit level were collected during the wet season (April to October), particularly in May to August, which suggest the observation of seasonal effect on the DO monitoring results. Based on above observations, as well as the relevant investigation findings presented in the Construction Phase Monthly EM&A Reports, it is considered that the Project did not cause adverse impact on DO level at all water quality sensitive receivers.



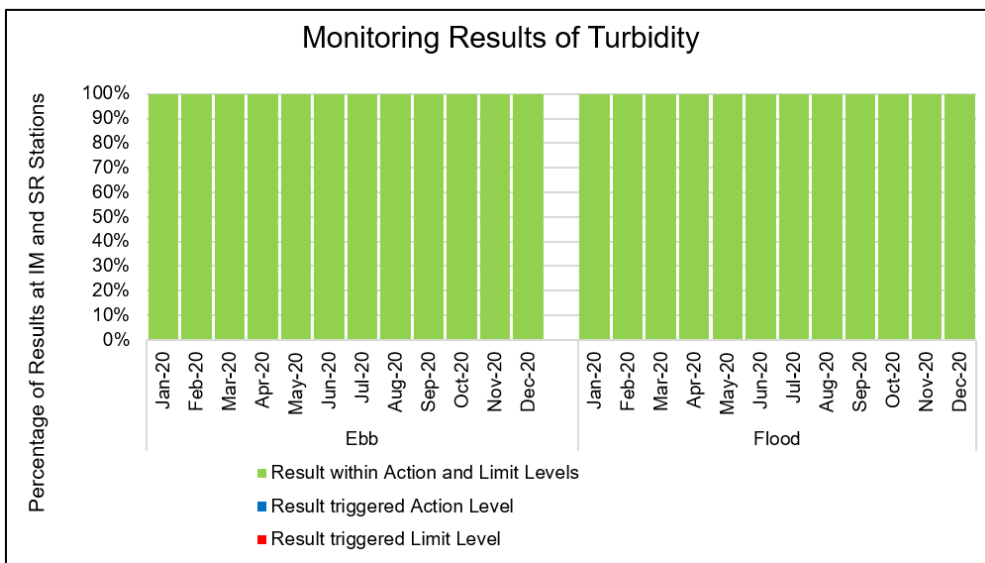
**Notes:**

1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/QC requirements as stipulated in the EM&A Manual was carried out during measurement.

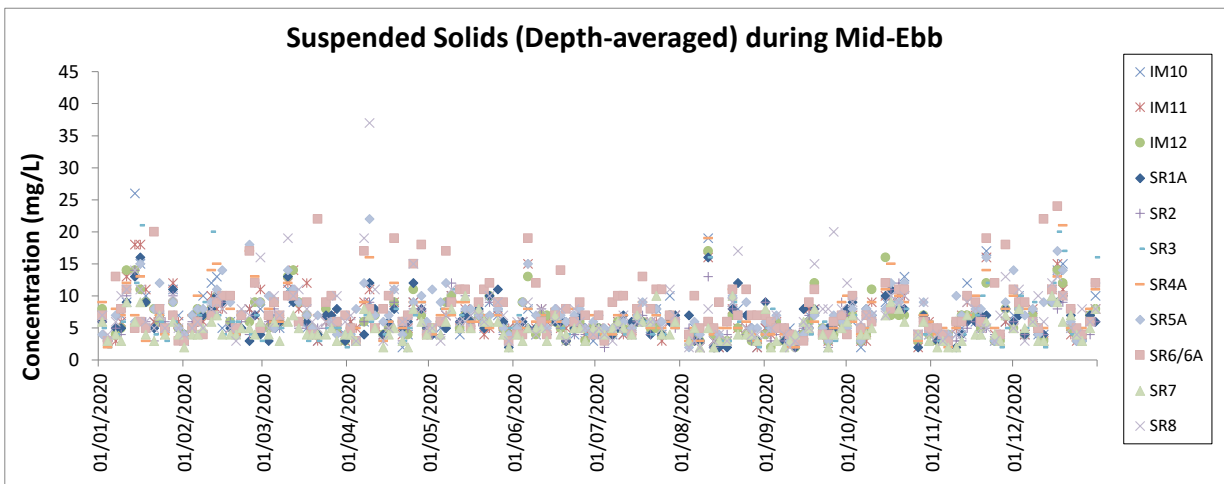
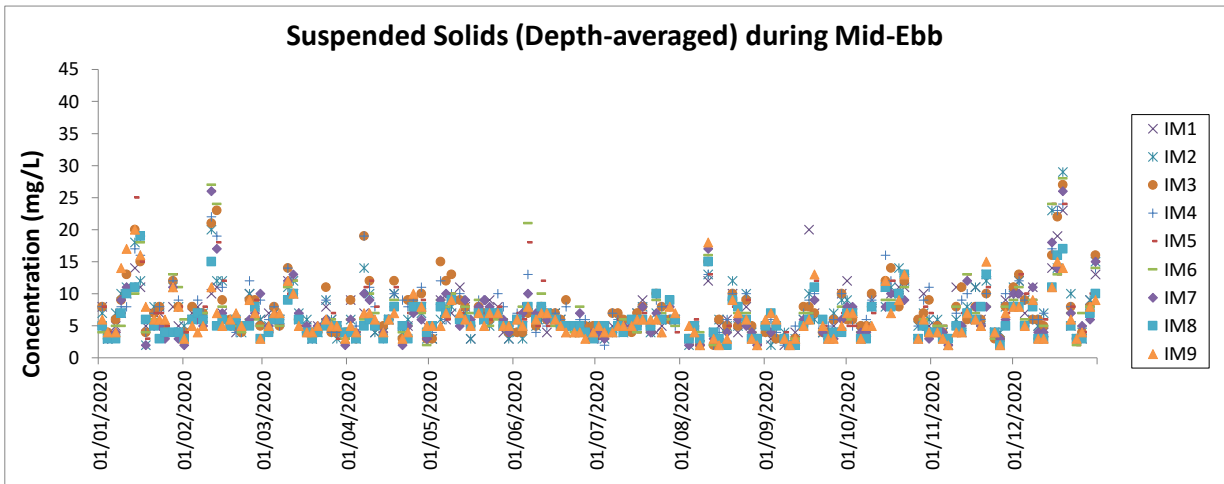
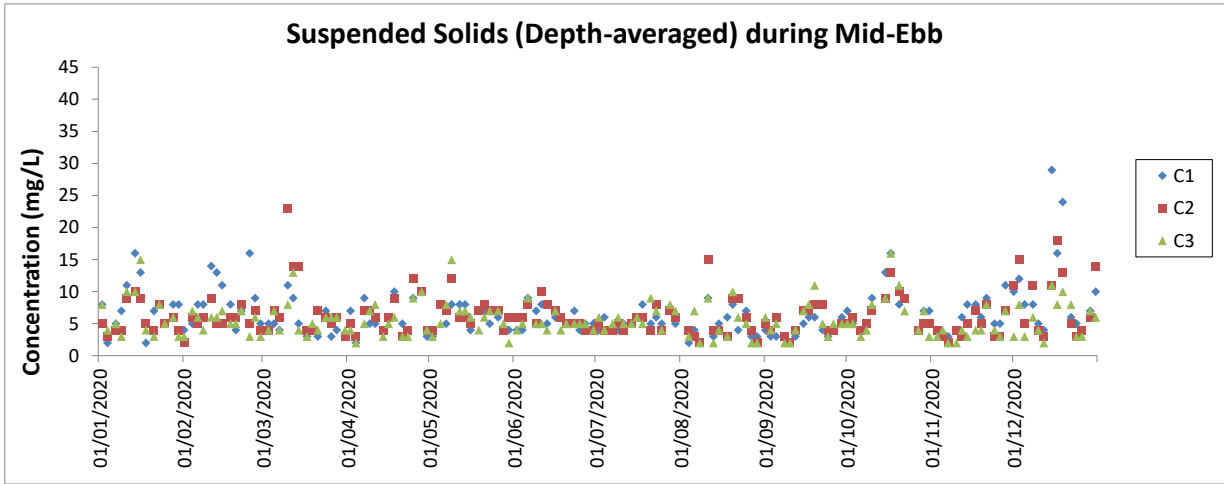


**Notes:**

1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.

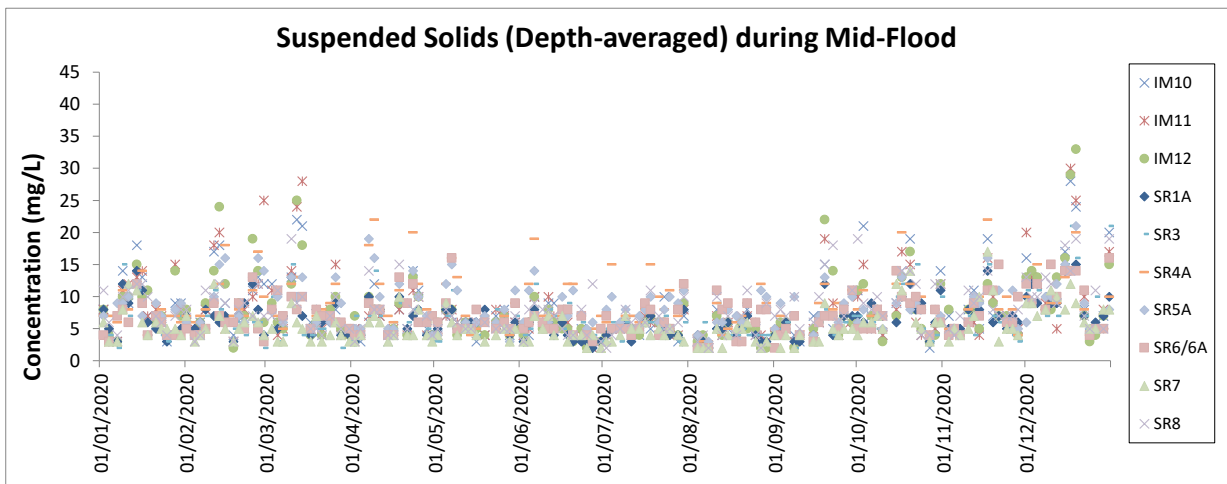
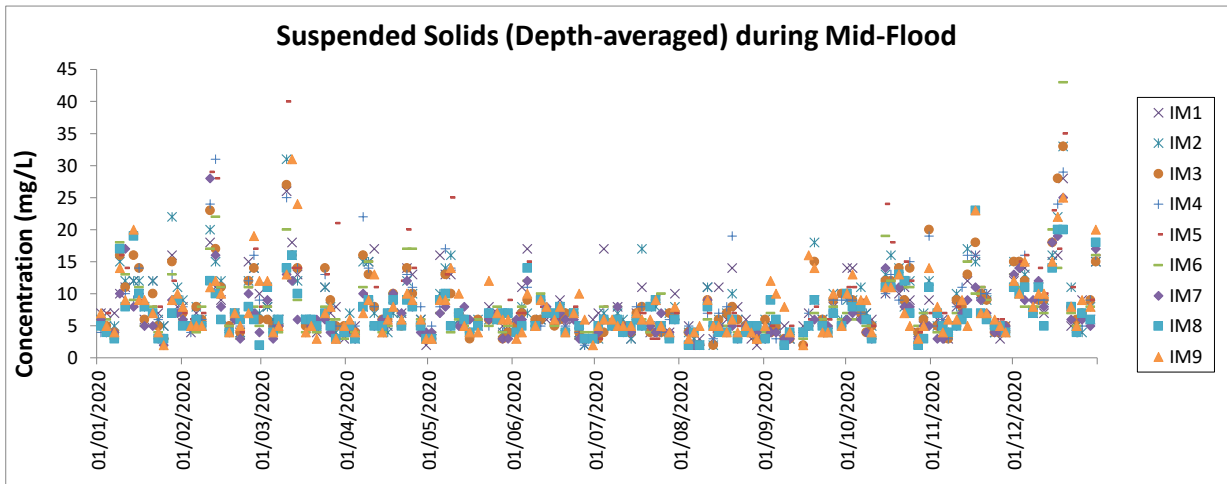
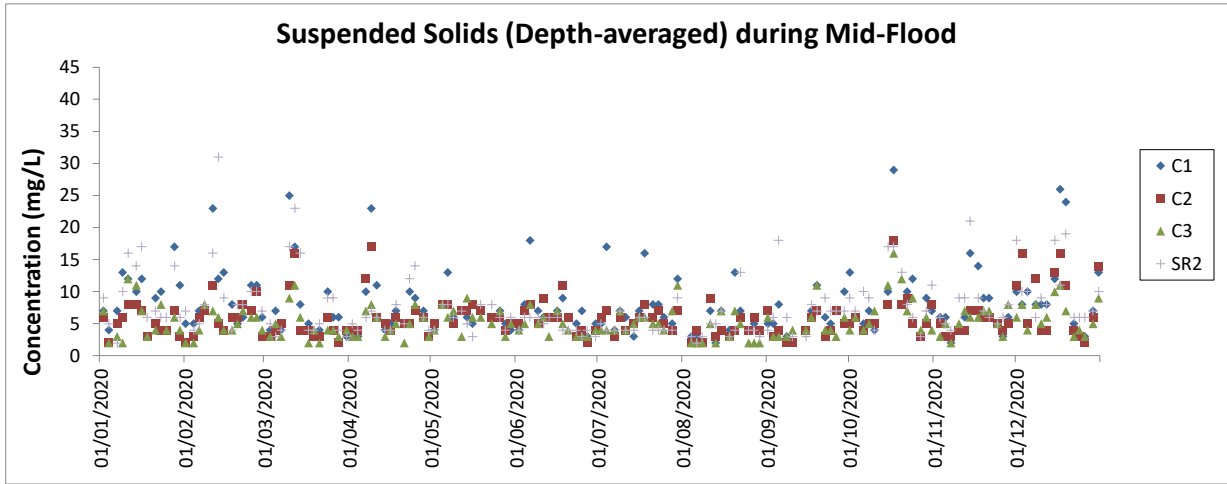


All turbidity monitoring results in the reporting period were within the corresponding Action and Limit Levels.



**Notes:**

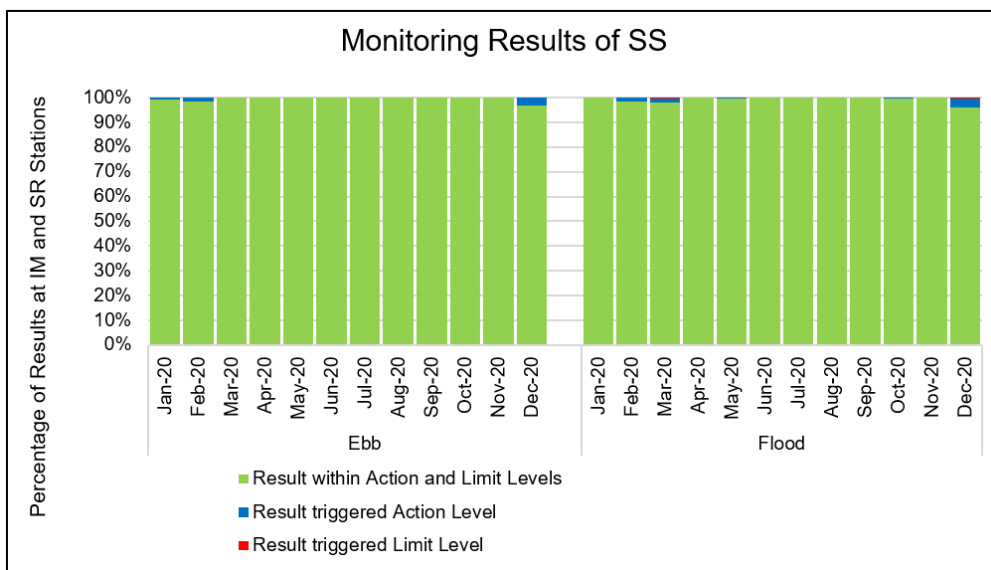
1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.



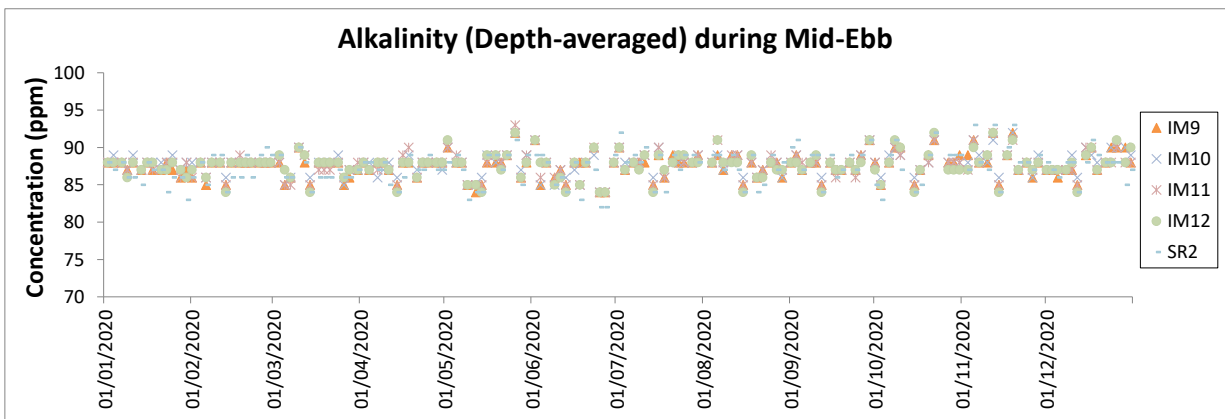
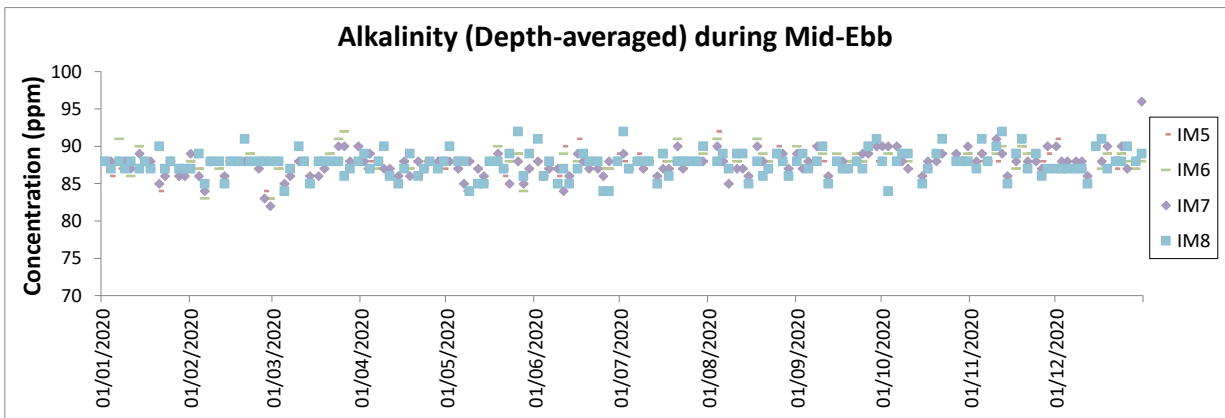
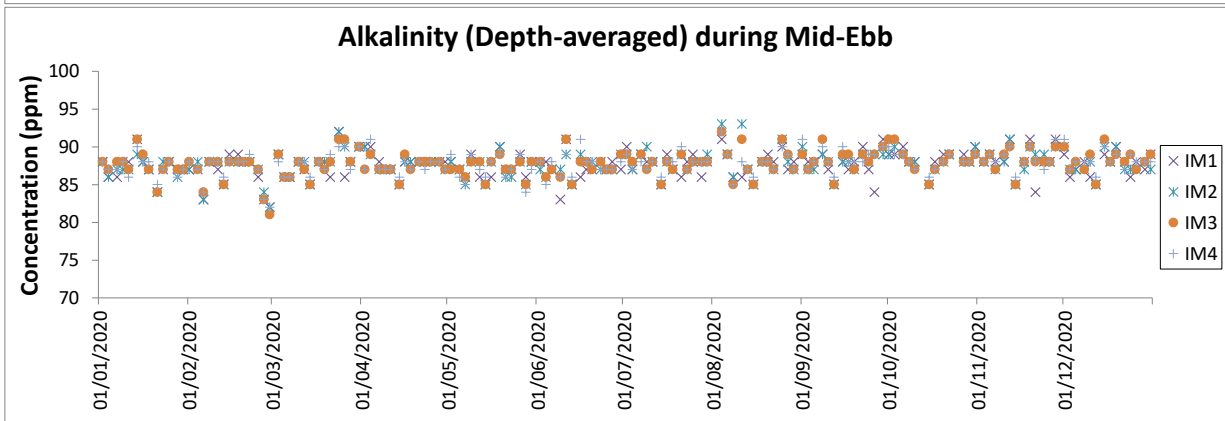
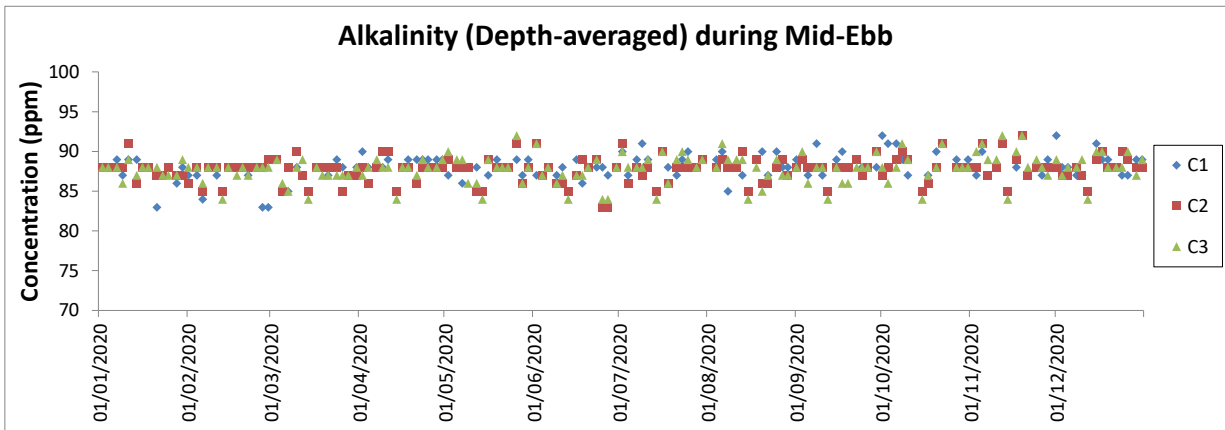
**Notes:**

1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.



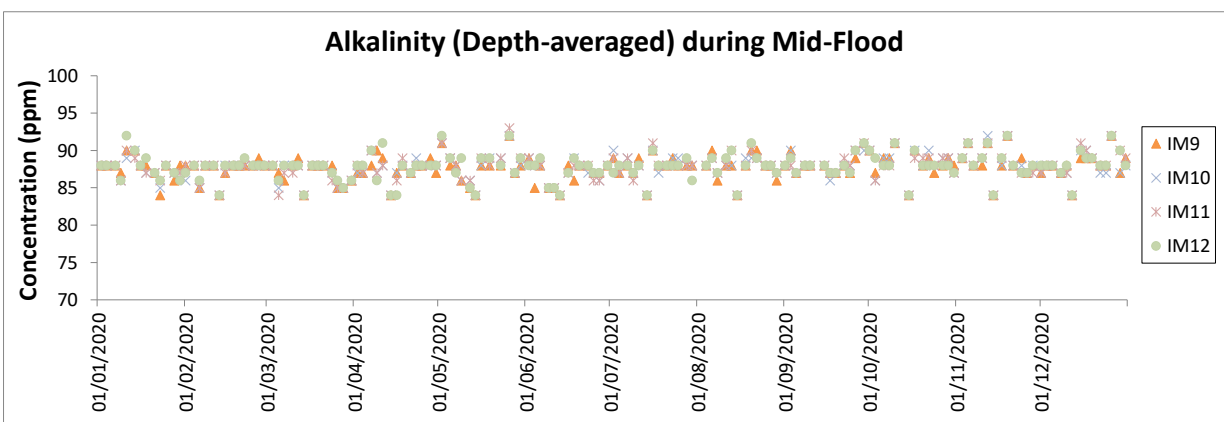
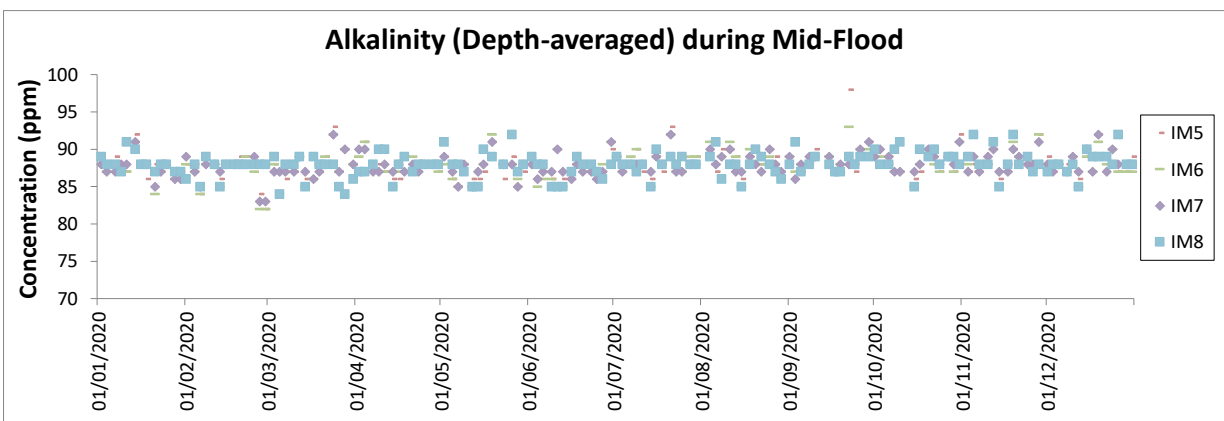
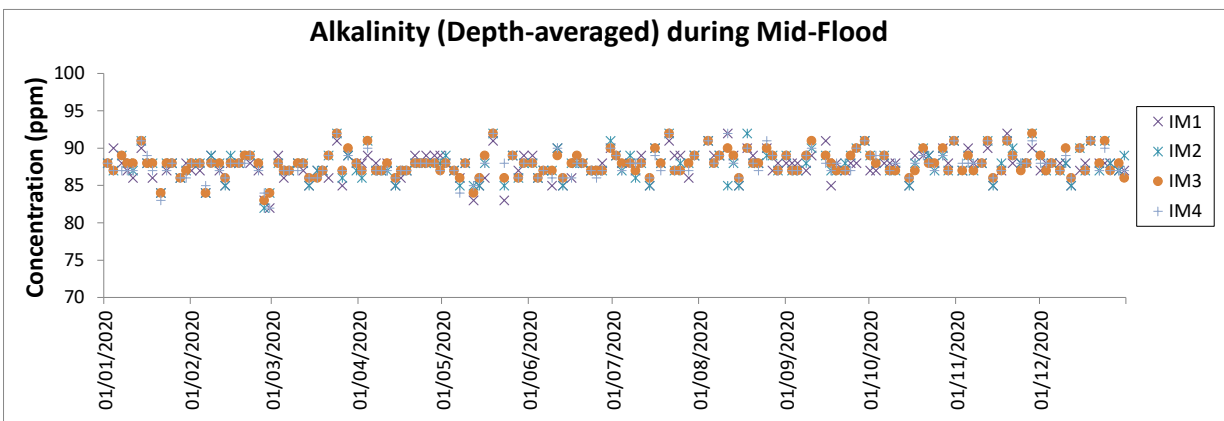
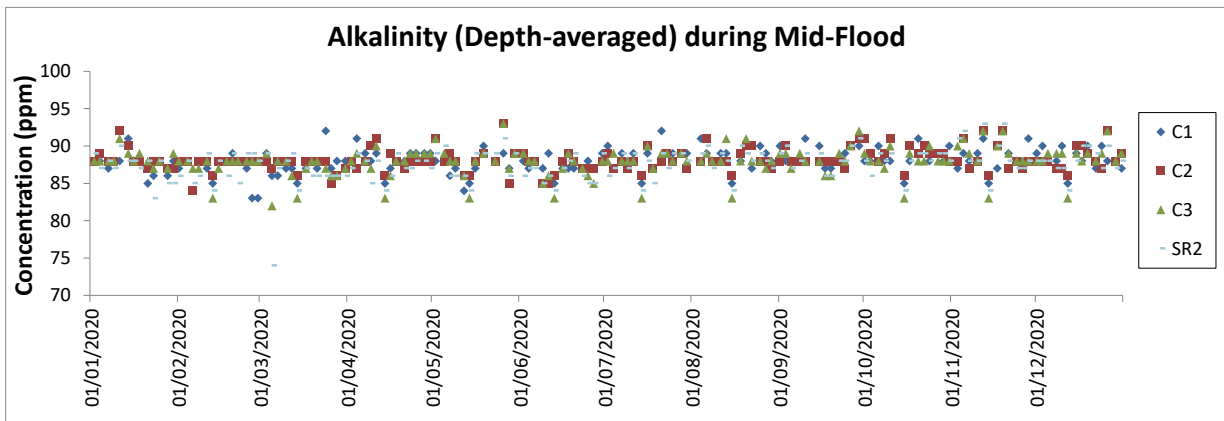


During the reporting period, 0.6% of the SS monitoring results triggered the corresponding Action or Limit Levels. Due to the small number of results triggering the Action or Limit Levels, and the relevant investigation findings presented in the Construction Phase Monthly EM&A Reports, it is considered that the Project did not cause adverse impact on SS level at all water quality sensitive receivers.



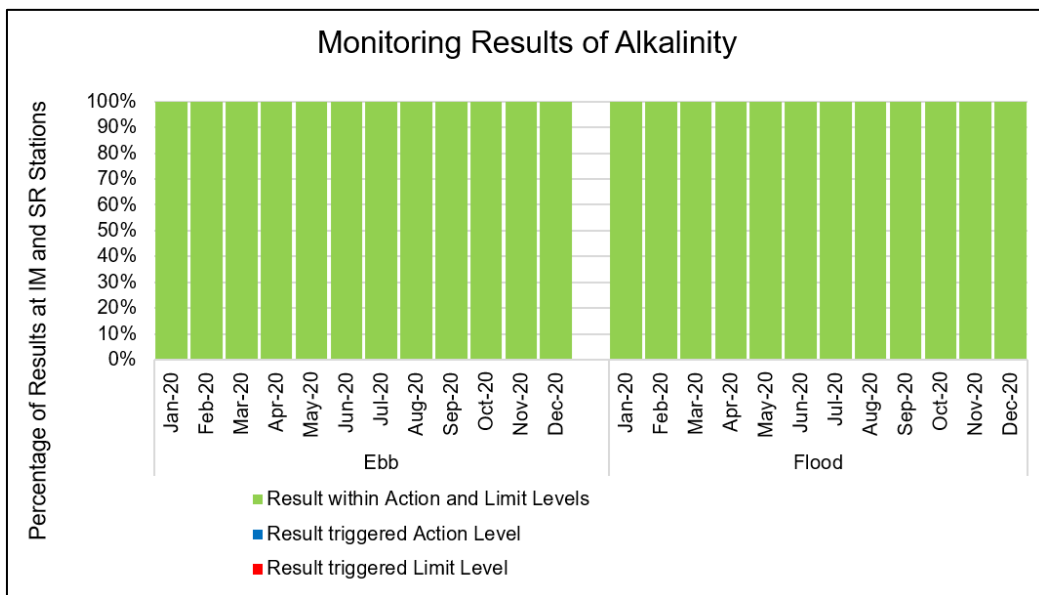
**Notes:**

1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.

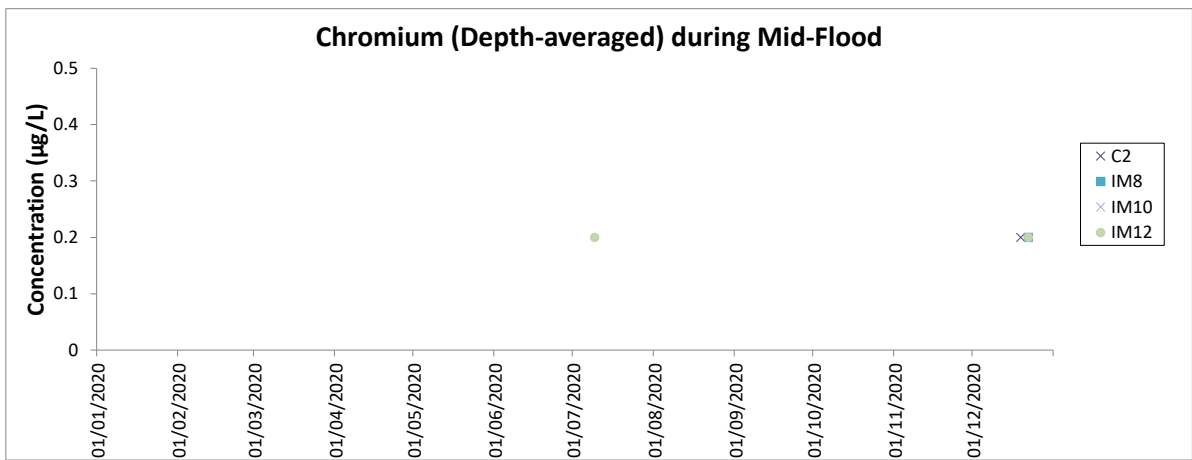
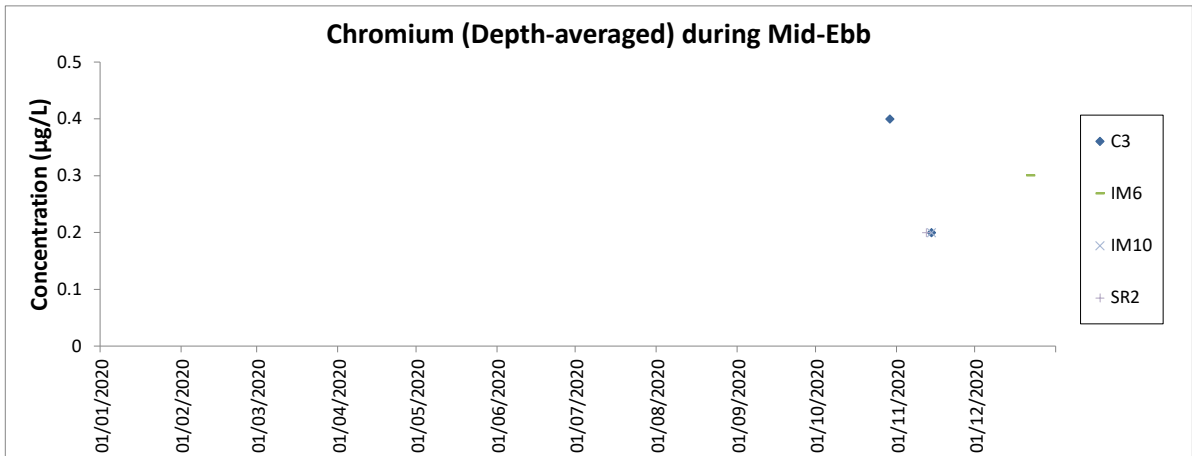


**Notes:**

1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.

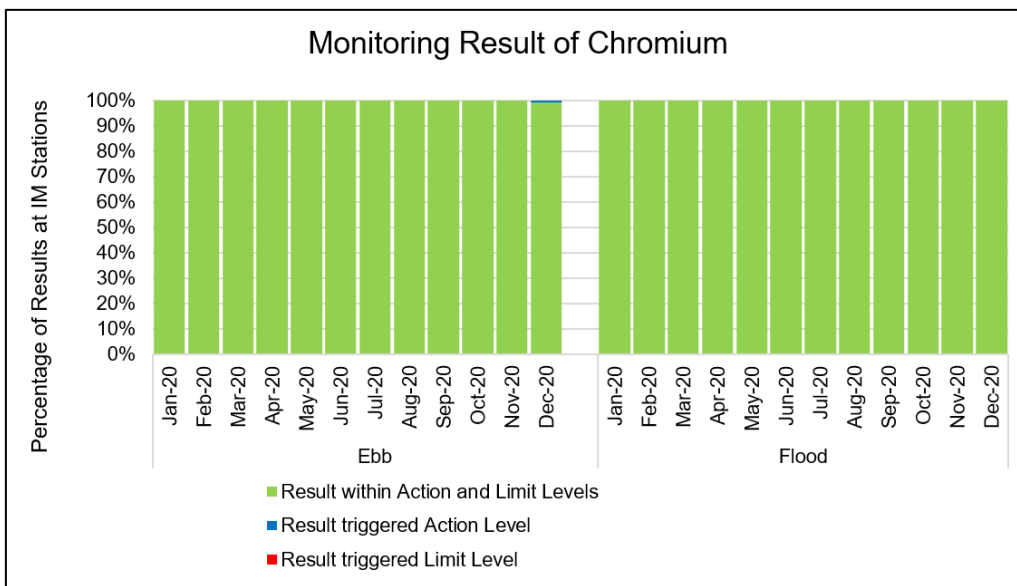


All alkalinity monitoring results in the reporting period were within the corresponding Action and Limit Levels.

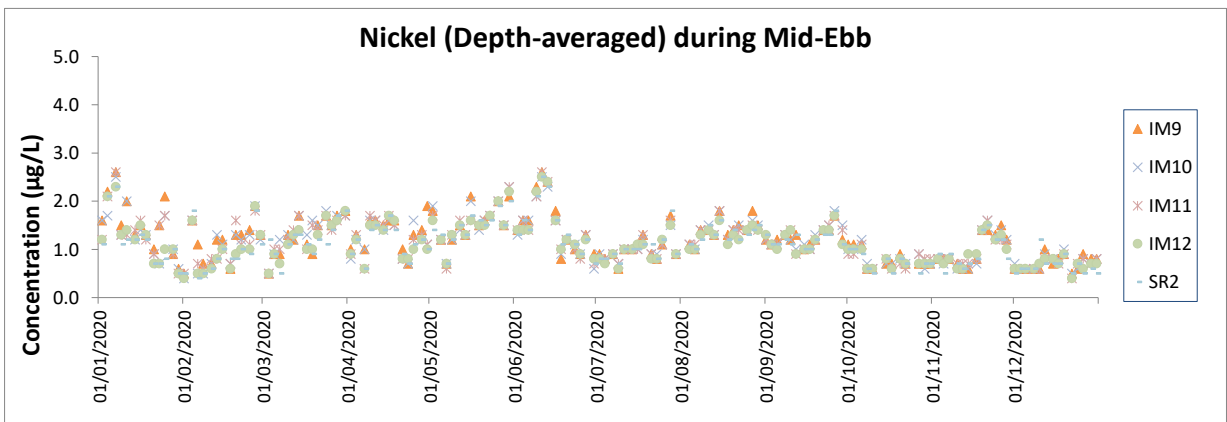
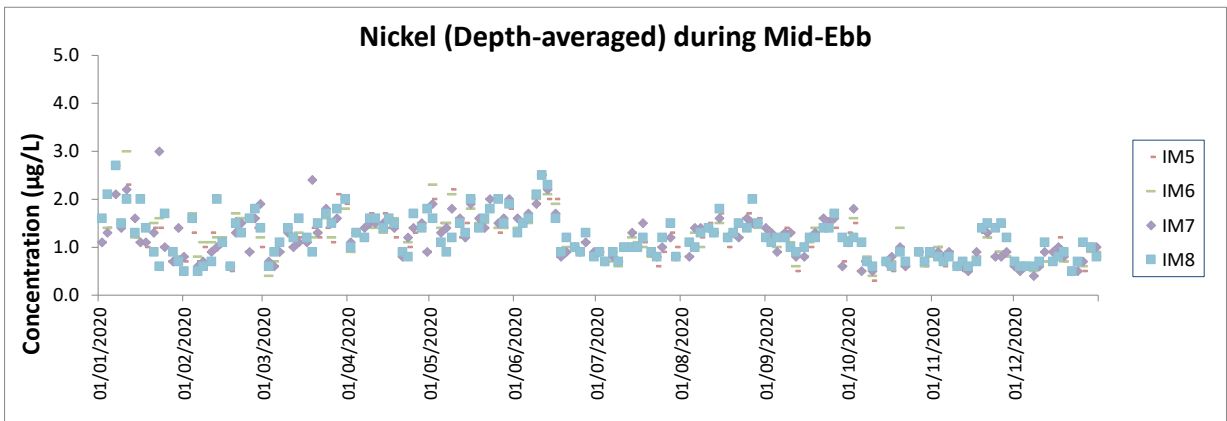
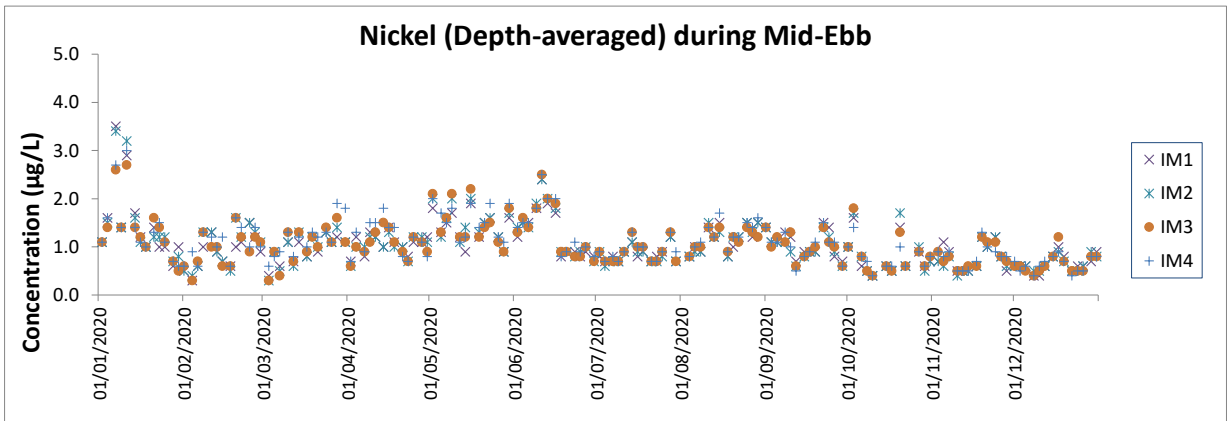
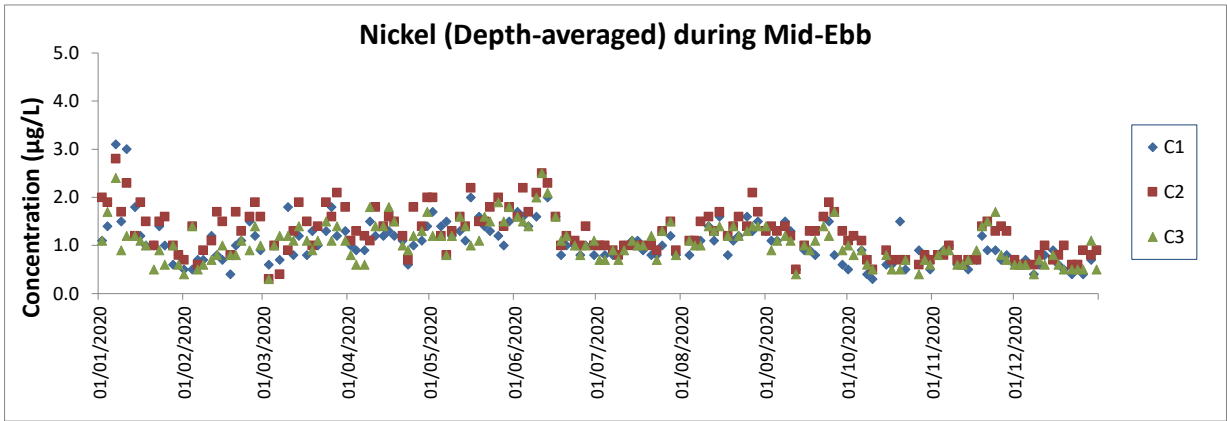


**Notes:**

1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The monitoring results of chromium at all other monitoring stations were below the reporting limit of 0.2 µg/L.
3. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
4. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
5. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.

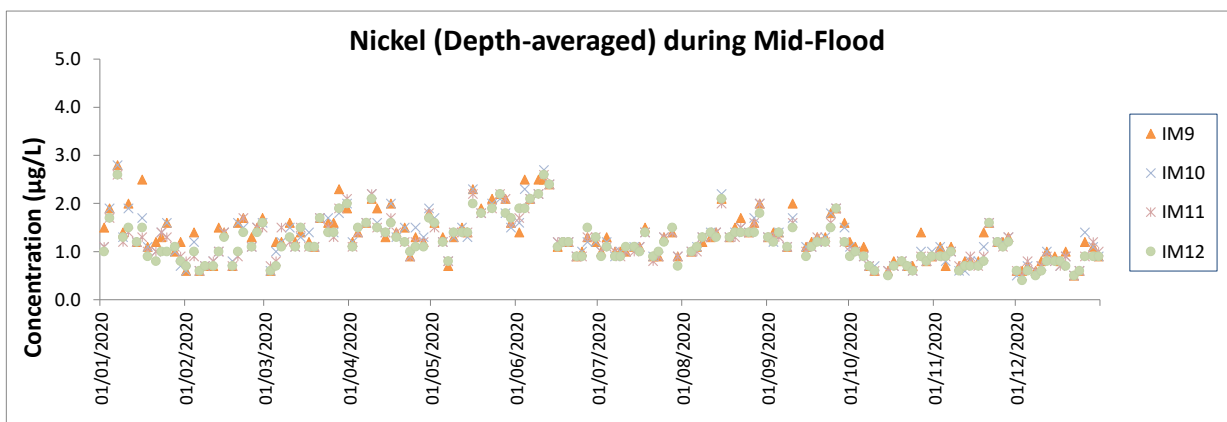
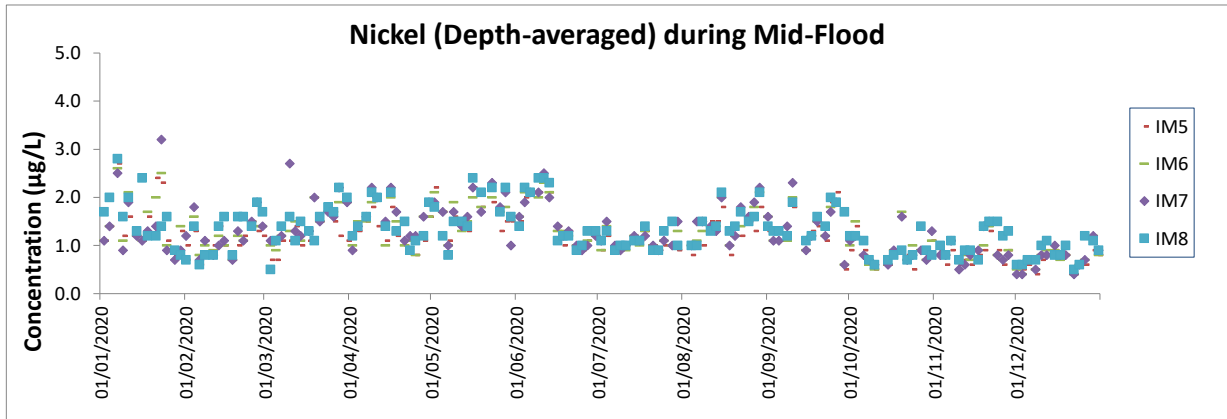
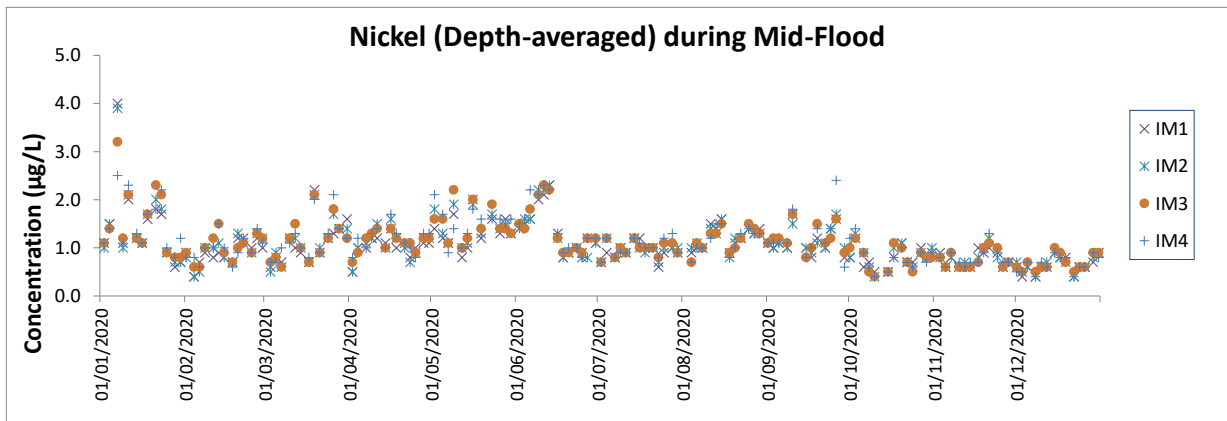
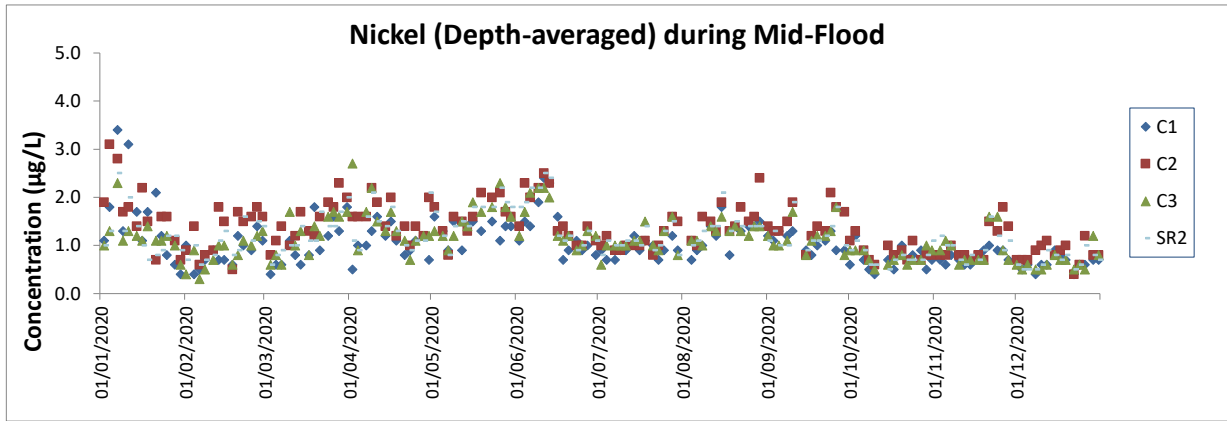


During the reporting period, 0.03% of the chromium monitoring results triggered the corresponding Action Level. It appeared that the case was isolated with no observable temporal and spatial trend that might be related to Project activities.



**Notes:**

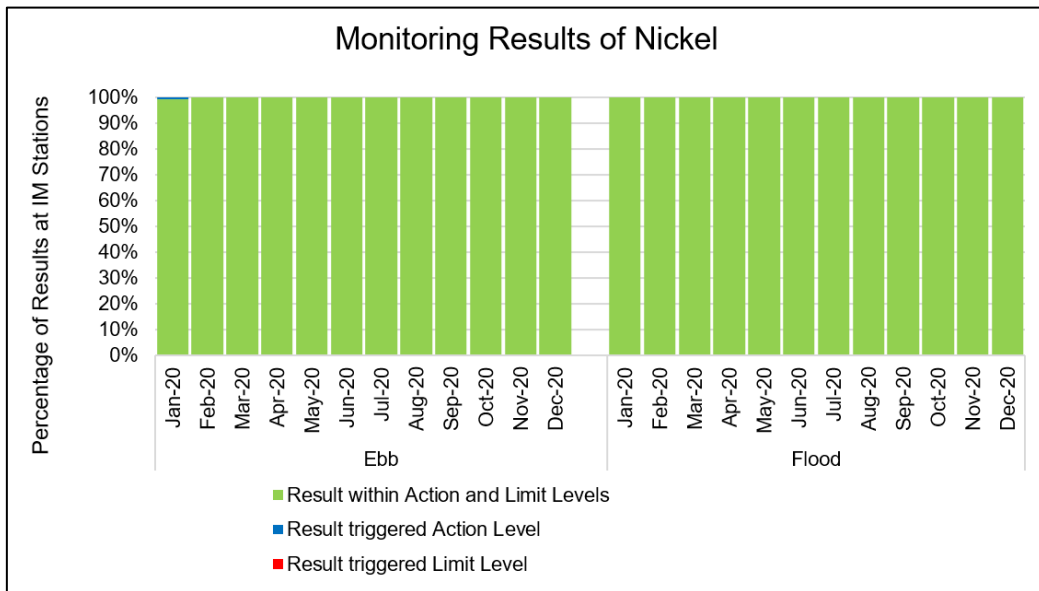
1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.



**Notes:**

1. The Action and Limit Levels can be referred to Table 2.8 of the Annual EM&A Report.
2. The key marine works activities of the Project during monitoring included DCM works, marine filling, seawall and facilities construction, together with runway and associated works such as bored piling for approach lights.
3. General weather condition during monitoring ranged from sunny to rainy, with sea condition ranged from calm to rough. Detailed meteorological conditions should be referred to Table 2.10 of this Report and corresponding Monthly EM&A Reports.
4. QA/ QC requirements as stipulated in the EM&A Manual was carried out during measurement.





During the reporting period, 0.03% of the nickel monitoring results triggered the corresponding Action Level, which was lower than that recorded in the previous reporting period. It appeared that the case was isolated with no observable temporal and spatial trend that might be related to Project activities.

Combining the observations from the monitoring results of the two representative heavy metals for DCM works (chromium and nickel), the low percentage of results triggering corresponding Action Levels together with the investigation findings concluded that these cases were not related to the Project, indicating that DCM activities during the reporting period did not cause adverse water quality impact.