Contract No. HY/2011/03 : Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road - Section between Scenic Hill and Hong Kong Boundary Crossing Facilities 14th Quarterly EM&A Report

Appendix F - Site Audit Findings and Corrective Actions

Site Inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. During the reporting period, site inspections were carried out on 2, 9, 17, 23 and 29 December 2015, 6, 13, 20 and 29 January 2016 and 3, 12, 15 and 26 February 2016. Particular observations during the site inspections are described below.

Date of Audit	Observations	Actions Taken by Contractor / Recommendation	Date of Observations Closed
2 Dec 2015	 Some construction materials were placed near the entrance of wheel washing bay at S23. Accumulated waste was observed at N4. The bund next to the seafront was incomplete at S7. There was a potential to wash away silt or debris into the sea. Rubbish was scattered on the ground at S7 and S19. A rubbish bin was full and rubbish were placed next to the bin at S25. Silt/dirt was observed on the footpath near S7. 	 The drivers were asked to back their vehicles to the wheel wash facility to wash wheels thoroughly prior to leaving the site. The accumulated waste was removed at N4. The bund was maintained properly next to the seafront at S7. The rubbish was removed at S7 and S19, and the rubbish was disposed of regularly at S25. The silt/dirt on the footpath was cleaned up near S7. 	9 Dec 2015
	Blockage of wheel washing facility was observed at N4.	The blockage has been removed from the wheel washing facility.	6 Jan 2016
	7. A slit curtain was not properly aligned near S7.	7. The silt curtain was aligned properly near S7.	12 Feb 2016
	8. Some of barriers were placed with adsorptive side facing NSRs at S16.	8. The noise barriers were removed at S16.	12 Feb 2016
9 Dec 2015	 An empty oil drum was observed at HMA site. There was a gap in the bund at S7. An abandoned tire was observed at S7. Stagnant water was observed at S8. Chemical containers were placed on the ground without drip trays at S11. No wheel washing was provided for vehicles before leaving the site at N26. 	 The empty oil drum was removed at HMA. The bund was maintained properly and no gap was found. The abandoned tire was removed at S7. The stagnant water was removed at S8. The chemical containers were removed at S11. Wheel washing was provided for vehicles before leaving the site at N26. 	17 Dec 2015

Date of Audit	Observations	Actions Taken by Contractor / Recommendation	Date of Observations Closed
17 Dec 2015	A slit curtain was not properly aligned at Portion X.	The silt curtain was aligned properly at Portion X.	12 Feb 2016
	 Stagnant water was observed at S8. No drip tray was provided for chemicals at S11. Stagnant water was observed in a steel beam at S11. Blue hoses for discharging treated effluent from a wastewater treatment facility was placed inside a shallow concrete pit at S23. 	 A pump was provided to pump the stagnant water out for treatment at S8. A drip tray was provided for the chemicals at S11. The stagnant water contained in the steel beam was removed at S11. The blue hose (treated effluent) was connected to a designated discharge point at S23. 	23 Dec 2015
23 Dec 2015	 Rubbish was observed near the seafront at S7. Wastewater was pumped into a concrete pit for storage at N4. Oil drums were observed without drip tray at N20. Dust was observed at a haul road during vehicle movement at N26. Mechanical cover of a dump truck was not close when materials were being transported at S16. Rubbish was scattered on the ground at S19. Stagnant water was observed near roadside at S23. 	 The rubbish was removed near seafront at S7. Wastewater hose was connected to wastewater treatment facility at N4. The oil drums were removed at N20. Spraying water to haul road was carried out to prevent dust generation during vehicle movement at N26. The mechanical cover of dump truck was covered when transferring dusty materials at S16. The rubbish was removed on the ground at S19 The stagnant water was cleaned up near roadside at S23. 	29 Dec 2015
29 Dec 2015	 Stagnant water was observed at the drip tray of A2 bridge at N20. Dusty stockpile without dust control measures was observed at N26. No wheel washing was provided for vehicles before leaving the site at N26. Storm drain at N26 site exit was not protected. Mixer of wastewater treatment plant at N26 was not properly operated. The protection of storm drain near the wastewater treatment plant at N26 was insufficient. No chemical label was provided for a chemical container at N26. 	 As the drip tray of A2 bridge of at N20 was removed, no stagnant water was observed. The dusty stockpile was watered at N26. Wheel washing was provided for vehicles before leaving the site at N26. The storm drain at N26 site exit was covered. It was observed that the mixer was switched on during the operation of wastewater treatment facility. Sand bags were placed around the storm drain. The chemical container was removed at N26. 	6 Jan 2016

Date of Audit	Observations	Actions Taken by Contractor / Recommendation	Date of Observations Closed
6 Jan 2016	 Stagnant water was observed inside a steel beam at N4. Stagnant water was observed inside drip trays at N4. More than twenty bags of cement were not covered entirely by impervious sheet at S15. Accumulated waste was observed at S16. Stagnant water was observed on the ground at S23. No chemical labels and drip trays were provided for chemical containers at N1. 	 The stagnant water inside the steel beam was removed at N4. As the drip trays were removed, no stagnant water was observed at N4. The cement bags were covered entirely at S15. The accumulated waste was removed at S16. The stagnant water was removed on the ground at S23. The chemical containers were removed at N1. 	13 Jan 2016
13 Jan 2016	 Accumulated general refuse was observed at PR9. Treated wastewater was discharged directly on the ground at PR9. No sand bags were placed along the seafront of S7 to prevent discharge of silty surface runoff into the sea. Damaged blue hoses which were used to divert treated wastewater to the discharge point were observed at S11. No drip trays were provided for chemical containers at S8. Stagnant water was observed at S8. More than twenty bags of cement were not covered at N1. 	 The accumulated general refuse was cleared at PR9. Proper connection for the wastewater treatment facility was provided at PR9. Proper bunding were provided along the seafront to prevent discharge of silty surface runoff into the sea at S7. The damaged blue hoses at S11 were replaced by new blue hoses and no leakage was observed. The chemical containers at S8 were removed. The stagnant water was cleared at S8. The cement bags were covered entirely at N1. 	20 Jan 2016
20 Jan 2016	 No proper enclosure was provided for a grouting station at HAT. No protection was provided around the manhole which has been used as wastewater discharge point at HAT. Accumulated waste was observed at HMA. No drip tray was provided for oil drums at S7. 	 Proper enclosure was provided for the grouting station at HAT. Sand bags were provided around the manhole to prevent discharge of silty surface runoff into the drain at HAT. The waste was cleared at HMA. The oil drums were removed at S7. 	29 Jan 2016
29 Jan 2016	 Concrete waste was observed at N1. Cement bags were not covered with impervious sheets at several locations at N1. Rubbish scattered on ground was observed at several locations at N1. Stagnant water was observed at N1. No drip tray was provided for chemical drums at N1. 	 The concrete waste was cleared at N1. The cement bags were covered entirely by the impervious sheets at N1. The rubbish was cleared at N1. The stagnant water was cleared at N1. A drip tray was provided for chemical containers at N1. 	3 Feb 2016

Date of Audit	Observations	Actions Taken by Contractor / Recommendation	Date of Observations Closed
3 Feb 2016	 Accumulated construction waste was observed at A2 bridge. No proper protection was provided along the deck of the barging point at S7 to avoid dropping the filling material into the sea. Dusty materials were scattered along roadside of S7. The capacity of the sedimentation tank at S11 should be increased as the treated water is muddy. Muddy water was discharged at S11. Sand was scattered at roadside of S25. No wheel washing facilities was provided at the exit of S25. 	 The accumulated construction waste was cleared at A2 bridge. Sand bags were provided along the haul road of the barging point at S7. The dusty materials were cleared at S7. The wastewater inside the sedimentation tank was clear. Wastewater generated from the construction sites was connected to wastewater treatment facility for treatment and no muddy water discharge was observed at S11. The sand scattered at roadside of S25 was cleared. Wheel washing was provided for vehicles leaving the construction site at S25. 	12 Feb 2016
12 Feb 2016	 General refuse was scattered on the ground at S15. Construction waste/general refuse was accumulated at S11. A chemical drum was placed on bare ground at S11. 	The general refuse was cleared at S15. The construction waste/general refuse was cleared at S11. The chemical drum was placed inside a drip tray at S11.	15 Feb 2016
15 Feb 2016	 No drip tray was provided for an oil drum and chemical containers at HMA. Milky wastewater was observed at discharge point PR10 at S9. No proper protection was provided along the seafront at S11. No drip tray was provided for chemical containers at S23. Accumulated sediment was observed inside a wastewater treatment facility S23. 	 A drip tray was provided for the oil drum and the chemical containers were removed at HMA. The wastewater was treated at S9. No milky wastewater discharge was observed. Sand bags were provided along seafront at S11. A drip tray was provided for the chemical containers at S23. The accumulated sediment inside the wastewater treatment facility was cleared at S23. 	26 Feb 2016
26 Feb 2016	 Gap between two silt curtains were observed at Portion X. Stagnant water was observed at S8. Prompt removal of stagnant water was needed to avoid mosquito breeding. It was unclear about the source of effluent discharge at S11. A gap was observed along the bund at S11. 	 No gaps were found between silt curtains at Portion X. The stagnant water was removed at S8. The water source of the drain pipe was labelled at S11. Sand bags were provided along seafront at S7 to avoid dropping of silt and debris into the sea. The rubbish was removed at S11. 	3 Mar 2016

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Date of Audit	Observations	Actions Taken by Contractor / Recommendation	Date of Observations Closed
	 Rubbish was accumulated at S11. Black smoke emitting from a piling rig was observed at S15. No drip tray was provided for chemical drums at S15. Stagnant water was observed at S15. No drip tray was provided for a chemical container at S15. 	 6. Black smoke no longer observed from a pilling rig at S15. 7. The chemicals were removed from the site and an additional drip tray was provided at S15. 8. Stagnant water was removed at S15. 9. The chemical container was removed at S15. 	

The Contractor has rectified the observations as identified during environmental site inspections in the reporting period.