

MTR Corporation Limited

REPROVISION OF BRIDGES D1 AND T
IN WEST KOWLOON

(Environmental Permit No. EP-414/2011)

Final Monthly Audit Report

Certified by:



(Mr. Raymond Wong)

Position:

Independent Checker

Date:

7 October 2020

REPROVISION OF BRIDGES D1 AND T IN WEST KOWLOON
Environmental Permit No. EP-414/2011
Final Monthly Audit Report

1. Introduction

- 1.1. The “Reprovision of Bridges D1 and T in West Kowloon” (hereinafter known as “the Project”) involves provision of replacement bridges and associated at-grade approach road section, and the demolition of two existing reinforced concrete bridges D1 and T in West Kowloon, to enable the construction of the Hong Kong Section of Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL).
- 1.2. A Project Profile (PP) (No.: PP-428/2011) was submitted for application for permission to apply directly for Environmental Permit (EP) and EP (EP No: EP-414/2011) was subsequently granted on 1 March 2011.
- 1.3. Pursuant to EP Condition 2.5, the implementation of mitigation measures recommended in the Project Profile (Register No. PP-428/2011) and in the EP shall audit by an independent checker during the construction period. And pursuant to EP Condition 2.6, a monthly audit report to confirm full implementation of the mitigation measures during and upon the completion of the construction.
- 1.4. Since the construction works with potential to cause significant environmental impact from the Project have been completed, the audit for the works area under the Project has been terminated on 30 September 2020.

2. Implementation Schedule

- 2.1. Throughout the whole construction period, regular site audits attended by independent checker, representative from MTR and Contractors were held monthly.
- 2.2. No complaint related to the works area under the Project was received during the construction period.
- 2.3. No environmental prosecution was received during the construction period.
- 2.4. No non-compliance has been identified in the whole construction period.
- 2.5. The schedule of the implementation of mitigation measures recommended in the PP and EP was given in Table 2.1

REPROVISION OF BRIDGES D1 AND T IN WEST KOWLOON
Environmental Permit No. EP-414/2011
Final Monthly Audit Report

Table 2.1 Implementation Schedule

Date of Audit: 30 September 2020

	Mitigation Measures	Implementation Status	Remark
Air Quality			
Section 5.1.1	Use of watering, with complete coverage, to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather.	Implemented until the site has handed over to HyD on 1 November 2018 for the preparation and construction of Central Kowloon Route (CKR) Project.	
	Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.		
	Use of side enclosure and impervious sheets, as well as watering, for any dusty material storage piles, if applicable, to reduce emissions.		
	Vehicle wheel and body washing at the exit points of the site.		
	Imposition of speed controls for vehicles on unpaved site roads. A maximum of 8 kilometers per hour is the recommended limit.		
	Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs.		
Construction Noise			
Section 5.1.2	Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program.	Implemented until the site has handed over to HyD on 1 November 2018 for the preparation and construction of Central Kowloon Route (CKR) Project.	
	Silencers or mufflers on construction equipment should be utilized and should be properly maintained during the construction program.		
	Mobile plant, if any, should be sited as far from NSRs as possible.		
	Machines and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.		

REPROVISION OF BRIDGES D1 AND T IN WEST KOWLOON
Environmental Permit No. EP-414/2011
Final Monthly Audit Report

	Mitigation Measures	Implementation Status	Remark
Construction Noise			
Section 5.1.2	Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.	Implemented until the site has handed over to HyD on 1 November 2018 for the preparation and construction of Central Kowloon Route (CKR) Project.	
	Material stockpiles and other structures should be effectively utilized, wherever practicable, in screening noise from on-site construction activities.		
Landscape and Visual			
Section 5.1.3	All the steelworks of the temporary bridge will be painted with a light grey colour to match with the adjoining existing concrete structures.	Implemented.	fulfil the requirement under Clause 2.4 of EP-414/2011.
	Employ soft landscape treatment at the areas around the piers for screening, reduction of scale and soften the structures. Planting species employed would be shade tolerant and with dense spread but short trunk so as to provide visual screening at grade.	Implemented.	fulfil the requirement under Clause 2.3 of EP-414/2011. The updated landscape plan has been submitted in January 2020 and granted the approval in April 2020. Hence the requirement under Clause 2.2 of EP-414/2011 has been complied with.
Water Quality			
Section 5.1.4	Surface run-off from construction site should be discharged into storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sedimentation basins.	Implemented until the site has handed over to HyD on 1 November 2018 for the preparation and construction of Central Kowloon Route (CKR) Project.	
	Open stockpiles of construction materials on sites should be covered with tarpaulin or similar fabric as necessary during rainstorms.		
	Good site practices should be adopted to remove rubbish and litter from construction site so as to prevent the rubbish and litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis.		

REPROVISION OF BRIDGES D1 AND T IN WEST KOWLOON
Environmental Permit No. EP-414/2011
Final Monthly Audit Report

	Mitigation Measures	Implementation Status	Remark
Water Quality			
Section 5.1.4	The presence of construction workers generates sewage. It is recommended to provide sufficient chemical toilets in the works areas and a licensed waste collector should be deployed to clean the chemical toilets on a regular basis.	Implemented until the site has handed over to HyD on 1 November 2018 for the preparation and construction of Central Kowloon Route (CKR) Project.	
	Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment. Regular environmental audit on the construction site can provide an effective control of any malpractices and can encourage continual improvement of environmental performance on site. It is anticipated that sewage generation during the construction phase of the project would not cause water pollution problem after undertaking all required measures.		
Waste Management			
Section 5.1.5	Prepare a Waste Management Plan approved by the Engineer/Supervising Officer of the Project based on current practices on construction sites.	Implemented	
	Training of site personnel in, site cleanliness, proper waste management and chemical handling procedures.	Implemented until the site has handed over to HyD on 1 November 2018 for the preparation and construction of Central Kowloon Route (CKR) Project.	
	Provision of sufficient waste disposal points and regular collection of waste.		
	Appropriate measures to minimize windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.		
	Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.		
	Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal.		

REPROVISION OF BRIDGES D1 AND T IN WEST KOWLOON
Environmental Permit No. EP-414/2011
Final Monthly Audit Report

	Mitigation Measures	Implementation Status	Remark
Waste Management			
Section 5.1.5	Encourage collection of aluminum cans by providing separate labeled bins to enable this waste to be segregated from other general refuse generated by the workforce.	Implemented until the site has handed over to HyD on 1 November 2018 for the preparation and construction of Central Kowloon Route (CKR) Project.	
	Proper storage and site practices to minimize the potential for damage or contamination of construction materials.		
	Plan and stock construction materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste.		
	Training should be provided to workers about the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycle.		
	Waste should be handled and stored well to ensure secure containment, thus minimising the potential of pollution.		
	Maintain and clean storage areas routinely.		
	Storage area should be provided with covers and, if necessary, water spraying system to prevent materials from wind-blown or being washed away.		
	Different locations should be designated to stock each material to enhance reuse.		
	Wheel washing facilities have to be provided before the trucks leave the works area. This can reduce the introduction of dust to the public road network.		
	In order to fully implement the trip-ticket system, it is recommended that warning signs should be put up at the temporary and permanent accesses of vehicle to remind the drivers of dump truck of the proper designated disposal outlet and the penalties of offence. To prevent illegal entrance of the dumping sites at night and during public holidays, fences should be installed.		

REPROVISION OF BRIDGES D1 AND T IN WEST KOWLOON
Environmental Permit No. EP-414/2011
Final Monthly Audit Report

3. Conclusion

- 3.1. Based on the results of the monthly audits in the whole construction period, the validity of the Project can be concluded, and the effectiveness and efficiency of the mitigation measures implemented as recommended in PP and EP were found to be satisfactory.