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Environmental Management and Post-EIA Follow-Up Programme of Railway Projects

INTRODUCTION

The purpose of this paper is to brief Members on the environmental management strategy and progress of the EIA-follow up programme for the construction of the following railway projects:

(1) West Island Line (WIL)
(2) Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL)
(3) Kwun Tong Line Extension (KTE)
(4) South Island Line (East) (SIL(E))
(5) Shatin to Central Link (SCL)

BACKGROUND

2. Sustainable planning and design of railway projects are hinged on early identification of significant environmental resources so that impact on them can be avoided and minimized at the maximum practicable extent. The strategy has been well implemented by the MTR Corporation Ltd. (MTR Corporation), and the environmental impacts anticipated from the projects are minimized and if necessary mitigated to acceptable levels as far as practicable through the environmental impact assessment (EIA) process.

3. Further to the approvals of the EIA reports, MTR Corporation continues to adopt a proactive approach to manage the environmental issues from the

construction stage of all five projects. A comprehensive EIA-follow up programme is implemented for monitoring of environmental performance.

4. In 2013, MTR Corporation took the initiatives to brief Members on the progress of the EIA-follow up programme for the railway projects. As the five projects are progressing, good site management practices and continuous public engagement are maintained to deal with various environmental challenges from construction. This paper presents an update on implementation status of various actions under the EIA follow-up programme since the last briefing. This paper also presents an overall view of the new initiatives that have been initiated by MTR Corporation to motivate the contractors for continuous environmental improvement.

ENVIRONMENTAL MANAGEMENT

5. The principle of "avoid, minimize and mitigate" in the order of priority has been adopted in the planning and design of railway projects. Early engagement of public and NGOs were also conducted to identify key concerns and their views were taken on board when feasible. Successful examples include realignment of Kennedy Town Station for WIL and its tunnel to avoid direct impact on the tree walls at Forbes Street, avoidance of Tei Lung Hau stream for SCL tunnel portal at Hin Keng and relocation of SCL stabling sidings to the vacant freight yard at Hung Hom to minimize impacts to the trees and one of the historic buildings, Stone House, at the former Tai Hom Village in Diamond Hill.

6. During the construction stage, MTR Corporation takes the ownership of overall environmental management of all projects, drawing on expertise technical support for implementation of comprehensive post-EIA follow up programme.

Post-EIA Follow-up Programme

7. As part of the EIA follow-up programme, an environmental monitoring and audit (EM&A) programme is implemented to monitor, audit and minimize environmental impacts associated with construction activities of these Projects in a systematic manner. The following are key programme updates for reference.

i. Environmental Monitoring and Complaints Handling

As of June 2014, approximately 24 600 numbers of noise, dust and water quality monitoring were conducted, and less than 2% were identified as valid exceedances. Follow-up actions were also taken in accordance with the procedures in the EM&A Manual. From projects commencement to June 2014, 89 valid complaints (i.e. 18% of total received complaints) had also been referred by EPD. Majority of them were related to noise, water quality and dust concerns and investigations had been carried out. Where necessary, liaison with contractors on further mitigation measures were conducted promptly and complainants were proactively engaged for better mutual understanding to directly address their concerns.

ii. Cultural Heritage and Archaeological Resource Management

The archaeological investigation of the XRL and SIL(E) project had been completed and all the relevant submissions been approved by the Antiquities and Monuments Office (AMO).

In accordance with SCL's EIA and Environmental Permit (EP) requirements, the recommended rescue excavation works at former Tai Hom Village site and the Sacred Hill (north) study area were completed in 2013 as per the respective Archaeological Action Plans (AAP) submitted to EPD following the Antiquities and Monuments Office (AMO)'s Guidelines. Of particular interest is at the Sacred Hill (north) where subsequent to the completion of the rescue excavation as designated under the EIA (Phase 1), some artefacts mainly dated to Song-Yuan Dynasties were discovered during construction works in Kai Tak. Further to site investigations and discussions with AMO, it was agreed that an archaeological watching brief (AWB) should be conducted at the launching shaft area (Phase 2). Since archaeological potential might exist in other excavation areas of the To Kwa Wan station (TKW), AWB works were extended to cover the rest of the TKW area (Phase 3).

Findings in the survey areas suggested that the site was disturbed by past developments (e.g rubbish pits, columns, modern structures, and past reclamation works for Kai Tak airport development). Some disturbed artefacts and features dated to late Qing Dynasty, Republic of China and Song-Yuan Dynasties were identified (e.g. pottery, ceramic shards, wells and

damaged building foundations). Protection works for archaeological features found in an area called T1 at the south-western section of the launching shaft were conducted to minimize potential impact from weather and nearby works as agreed with AMO. These works included installation of a sheetpile protection wall around T1 area, backfilling the square well, and providing sand bags to stabilize the archaeological features. Analyses of the findings are still in progress and a full report will be submitted to AMO afterwards.

The archaeological survey field works will tentatively be completed in end September 2014. MTR Corporation will continue to be in close discussions with AMO on the findings and preservation proposals for their consideration with the Antiquities Advisory Board (AAB).

The conservation works for the historic buildings (namely Former Royal Air Force Hangar and the Old Pillbox) and archaeological sites (namely Lung Tsun Stone Bridge and Former Kowloon City Pier) were also implemented according to EP requirements.

iii. Ecology and Tree Management

The condition of avifaunal communities surveyed at XRL works areas in proximity to conservation interested area (e.g. Mai Po Inner Deep Bay Ramsar Site, country parks, wetlands, conservation area, etc.) remain the same as presented in last year. Since commencement of the XRL Project in early 2010, no significant fluctuation in the number of species and abundance of avifauna has been observed and thus no unacceptable indirect impacts arising from the Project are identified.

The mitigation stream habitat will be provided in-situ within the works area of Shek Kong Stabling Sidings (SSS) and the Emergency Rescue Siding (ERS), in accordance with XRL's EIA and EP requirements. Stream diversion for allowing the habitat construction works has been done and re-contouring of stream bed is in progress. The habitat construction works will commence in Q3 of 2014 and target to be completed in 2016.

In terms of tree protection, Certified Arborists were engaged at the early stage of construction for their professional advice on the planning and implementation of appropriate protective measures in accordance with EIA

and Tree Removal Application recommendations. One example was the transplanting of two large Banyan trees at the Former Tai Hom Tsuen works site for SCL. With careful engineering design and tree expert input, the transplanting operation was successfully completed.

Additional Initiatives to Manage Environmental Challenges

8. Various initiatives have been introduced by MTR Corporation to encourage the contractors for innovative environmental solutions and maintain the momentum for continous environmental improvement. Environmental achievements and innoviations by contractors are recognized through the award and incentive payment scheme. To further promote environmental awareness, MTR Corporation had also initiated a Continuous Environmental Improvement Programme between 2012-2013 for experience sharing on environmental management. Under this programme, 15 environmental workshops / seminars attended by over 900 participants were conducted.

Continuous Public Engagement

9. Besides endeavouring to minimize possible environmental impacts through continuous monitoring and enhanced project management, it is necessary to let the community fully understand the nature of each project and its possible impacts on the community and environment. By communicating closely with the community through Community Liaison Groups, listening to their needs during meetings and provding timely responses and enhancements to address concerns on environmental issues, trust and undertanding are established between the community and the project team of MTR Corporation.

10. Featured websites and a dedicated project hotline for the five new railway projects have been set up to provide immediate response as well as appropriate course of action in addressing public enquiries and complaints.

11. Since 2007, regular communication sessions with Non-governmental Organizations have been conducted to solicit their views for consideration in the development and evaluation of project design and mitigation options throughout the process of project implementation. This engagement is being maintained for regular reporting of environmental impact monitoring and progress of works, enhancing the transparency of the projects.

CONCLUSION

12. Environmental management practices are maintained to safeguard that mitigation measures recommended in the approved EIA reports are properly in place. Apart from taking a proactive approach to communicating with the community, additional initiatives and innovations are also implemented so that environmental impacts due to the construction of all five projects are minimized as far as practicable while striving for continuous improvement.

MTR Corporation Limited
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