Kowloon-Canton Railway Corporation

KCRC East Rail Extensions Sheung Shui to Lok Ma Chau

Monthly EM&A Report – March 2003

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LDB201 Sheung Shui to Chau Tau Tunnels Monthly EM&A Report

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LCC300 Lok Ma Chau Station and Associated Works



EXECUTIVE SUMMARY

INTRODUCTION

This Report (in HTML format) is the ninth Monthly EM&A Report for the Sheung Shui to Lok Ma Chau Spur Line and includes the Monthly EM&A Reports for construction contracts LDB201 and LCC300. This Report and all monitoring data collected under the EM&A Programme are available on the KCRC East Rail Extensions Environmental Monitoring and Audit Website at www.env-ere.kcrc.com.

LDB201 Shueng Shui to Chau Tau Tunnels

The construction works for LDB201 commenced in late November. This report presents the EM&A findings in the period from 26 February to 25 March 2003. As the site area of LCC206 has been handed over to LDB201 for site preparation works, the major works area for the shaft excavation of LDB201 was on the same site as the LCC206 Contract. The drainage diversion works on East Approach Area at San Wan Road and the construction works on Kwu Tung Enabling Works Area were also commenced.

LDB201 has taken over all the monitoring locations AM1, NM3, URS and SR1 from LCC206 and the monitoring works at AM2, URB, RB1, NM1, NM2, NM4, NM5, NM6, NM7, NM8 and NM9 were commenced in this reporting month.

TSP monitoring was conducted once every six days and three sets of 1-hr TSP monitoring were conducted once every six days at the two monitoring locations. No exceedance was recorded at the monitoring locations in this reporting month

Noise monitoring was conducted once every six days during non-restricted hours at the identified monitoring locations. There was no exceedance recorded in the reporting month. Construction works were conducted during restricted hours along San Wan Road.

Water quality monitoring was conducted at the identified water quality monitoring locations. Full compliance for all parameters were recorded during the reporting month.

No notification of summons were received during the reporting month. However a yellow notice from EPD was received on 20 March 2003 regarding the inappropriate discharge of wastewater from the soil investigation works. Mitigation measures including stopping the drilling works immediately, cleaning up the area, advising how to control the fresh water supply rate and arranging a toolbox talk for the relevant workers were implemented.

Weekly site inspections were carried out by the CET and an IEC monthly site audit was conducted on 19 March. These resulted in the improvements including watering of the dusty ground, the immediate removal of debris from formworks, reinforcement and concrete works, the timely removal of refuse to maintain good hygiene condition, setting up of wheel washing facilities and wastewater treatment facilities for East EAP site, the provision of sandbags along the site boundary to divert water to proper drainage system, advising works to switch off the powered mechanical equipment when not in use, covering of stockpiles and using sandbags or concrete kerb to protect the water stream near the diaphragm wall machine on Kwu Tung site. The implementation and effectiveness of the corrective actions will be assessed during the next site audit.



LCC300 Lok Ma Chau Station and Associated Works

The EM&A programme for LCC300 commenced in mid-December. This report summarises the EM&A works conducted during the period from 26 February to 25 March. During the reporting month the principal work activities include site clearance for remaining areas, sand filling, construction of the site offices, surveying, site investigations, completion of the western drainage outfall, transfer of excavated clays to a temporary stockpile on the EVA, the mobilisation of piling operations and the possession and site clearance of land along Lok Ma Chau Road.

One set of 24-hr TSP and two sets of 1-hr TSP monitoring were conducted at AM4, Ha Wan Tsuen Village Playground. No exceedance was recorded in the reporting month.

Noise monitoring was conducted once every six days during non-restricted hours at three monitoring locations: NM13, Rear of house of Lok Ma Chau Closed Area Police Checkpoint, NM14, Rear of shop at Lok Ma Chau Closed Area Police Checkpoint and NM15, Ha Wan Tsuen Village. No noise level exceedance was recorded during monitoring period. There is no report of noise monitoring undertaken during restricted hours.

Water quality monitoring was conducted at one upstream station USTR, one downstream monitoring location STR1 at San Tin River, and three selected fishponds, namely, FP1, FP2 and FP3. There were a number of exceedances recorded on dissolved oxygen, turbidity and pH during the reporting month. The Contractor explained that the exceedances were not related to Contract LCC300 as there was no construction works conducted in the vicinity of the monitoring locations and it is likely that the exceedances are due to outside influences.

No complaint or notification of summons was received during the reporting month.

ET Leader and the Engineer have conducted regular site inspections and the IEC has conducted a monthly site audit on 19 March during the reporting month. These resulted in the improvements including the installation of enclosure on the conveyor belt, regular cleaning of public road outside the border gate, change of engine to reduce dark smoke emission, and the removal of empty chemical waste container. The implementation and effectiveness of the corrective actions will be assessed during the next site audit.



1 Introduction

Hyder has been commissioned by KCRC as the IEC for the East Rail Extensions, which include the Ma On Shan to Tai Wai Rail, the Hung Hom to Tsim Sha Tsui Extension and the Lok Ma Chau Spur Line. A requirement of the Contract is for the IEC to prepare a combined EM&A Report on a monthly basis for each of the above rail lines. The combined report combines the Monthly EM&A Reports for each of the construction contracts within each rail line. This Report (in HTML format) is the ninth IEC Monthly EM&A Report for the Sheung Shui to Lok Ma Chau Spur Line and includes the Monthly EM&A Reports for construction contracts LCC206, LDB201 and LCC300 and a summary of the reports. It also includes a brief summary of the IEC Site Audits and information supplied by KCRC on Public Consultation activities.

2 IEC monthly site audits

IEC monthly site audit was conducted on 19 March. Non-compliances and observations issued by the IEC are based on the requirements of KCRC's Environmental Management System.

2.1 Contract LDB201

The IEC site audit for LDB201 was undertaken on 19 March. The major construction activities include hoarding installation, excavation and drainage diversion on East Approach Area – San Wan Road, shaft excavation, reinforcement fixing, concreting for gantry beam of launching shaft and backfilling at DSD channel at River Sutlej on Sheung Shui Launching Shaft Area, site clearance, formation works and erection of hoarding on East EAP Area, site preparation and site formation on Kwun Tung Site and site clearance work on West Approach Area. Five observations have been raised during the site audit:

East Approach Area – San Wan Road

- 1. The hoarding was not adequately sealed to prevent the surface and muddy runoff from the site flowing onto the public road.
- 2. The storm drains were not adequately protected to avoid untreated surface runoff flowing into it.

Sheung Shui Launching Shaft Area

3. Engine of excavator remained switched on when not in use.

Kwu Tung Enabling Works Area

4. Stockpiles were not covered during site audit.



5. Water stream near the diaphragm wall machine was not adequately protected to avoid material / soil falling into the stream.

As a result of the observation raised by the IEC, the Contractor shall provide mitigation measures including the provision of sandbags along the site boundary to divert water to proper drainage system, advising works to switch off the powered mechanical equipment when not in use, covering of stockpiles and using sandbags or concrete kerb to protect the water stream near the diaphragm wall machine on Kwu Tung site. The implementation and effectiveness of the measures will be assessed and verified during the next site audit.

2.2 Contract LCC300

The IEC site audit was conducted on the same day. The major construction works include the erection of site offices, hoarding, surveying, site investigations, jetty mini-piling works, sheet pilings, excavation and pipe ramming works for the western drainage channel to Shenzhen River. Four observations have been raised during the site audit:

- 1. Although the conveyor belt is still under testing, loading of sand for testing should be conducted carefully to prevent materials falling into the Shenzhen River from the conveyor belt.
- 2. The contractor is reminded to pay close attention to the silty surface runoff near the border gate to prevent the runoff flowing into the Shenzhen River through the ramp.
- 3. Black smoke emitting from the barge at the jetty was observed.
- 4. The empty chemical container should be put in chemical waste storage area and disposed of properly.

The Contractor will implement mitigation measures including the installation of enclosure on the conveyor belt, regular cleaning of public road outside the border gate, change of engine to reduce dark smoke emission, and the removal of empty chemical waste container. The implementation and effectiveness of the measures will be assessed and verified during the next site audit.

3 Public Consultation

The Community Liaison Group Meeting for Eastern and Western will be held on 8 and 30 April respectively.