

Monthly Executive Summary



Mass Transit Railway Corporation
EQPMS

Month: January
Year: 2007
Project: TKE

Description:

TSEUNG KWAN O EXTENSION PHASE II

EM&A Report No. 7

EXECUTIVE SUMMARY

This is the seventh Environmental Monitoring and Audit (EM&A) Monthly Report for the construction of Tseung Kwan O Extension Phase II Tseung Kwan O South Station in TKO Area 86. The Report concludes the impact monitoring from the construction works undertaken during the period of 12 December 2006 to 11 January 2007 for the following contract:

Contract 617 - The construction of Tseung Kwan O South Station and approach structure. The contract was awarded on 9 June 2006. The construction work commenced on 12 June 2006. The contract also included the construction of Road L861 which was entrustment work by CEDD and this roadwork construction is not a Designated Project.

Contract 606A - Trackwork and Overhead Line System. The contract commenced on 7 August 2006. The construction work is scheduled to commence in mid 2007. The contract also included the construction of noise barriers/ enclosures at the Pak Shing Kok Open Track Section adjacent to Wan Po Road.

The EM&A programme was undertaken based on the EM&A Manual. In general, the Contractor had followed the recommended environmental mitigation measures and complied with the relevant regulations, permits and licenses. With reference to the regular site inspections and audits, the environmental conditions of the work sites were satisfactory. There was no dust level exceedance recorded during the monitoring period. Baseline check was conducted in end December 2006, there was no significant change in the 24-hour TSP baseline level as compared with the previous baseline levels. In addition, no environmental complaint and prosecution was received in the reporting period.

IMPACT MONITORING

Construction Activities in Area 86

Major site activities carried out by Contract 617 during the reporting period included foundation and base slab construction for station and retaining walls and bridge decks construction together with filling excavated material for surcharging at Road L861.

There were interface contracts for the property development in Area 86 and their major site activities carried out during the reporting period included superstructure, foundation and drainage construction.

Air Quality Monitoring

To measure the construction dust levels, 24-hour TSP monitoring was undertaken according to the EM&A Manual. The results as shown in Annex A indicated that the 24-hour TSP levels when there were construction activities during the monitoring period were within the Action Level. The graphical plot of monitored trend is shown in Annex B.

No dust level exceedance was recorded during the monitoring period.

Baseline check was conducted in end December 2006, the result for the average 24-hour TSP baseline level was 144.6 ug/cu.m. There was no significant change in the 24-hour TSP baseline level as compared with the baseline level of 119.8 ug/cu.m obtained in May 2006 and that of 149 ug/cu.m adopted for the TKO Depot construction established in January 1999 as shown in Annex D. As such, the Action Level of 200 ug/cu.m will be maintained.

Waste Management

In order to ensure that the effective management and implementation of waste mitigation measures developed and defined in the EIA, waste management audit was carried out by the ET on a monthly basis. In addition, the weekly site inspections covered the waste management issues on site. The audit findings were recorded and some observations were noted as follows:

Findings for Waste Management Audits:

1. Drip trays were used to store diesel oil drums to prevent spillage of diesel oil onto the ground during handling;
2. Licensed waste collector would be used for chemical waste collection;
3. General refuse would be disposed of at designated landfill;
4. Recycling of C&D materials was implemented;
5. Storage area for general refuse was covered to avoid hygiene problem;
6. Storage bins to collect general refuse were properly labelled and provided at works area which were at a distance from the site office.

Records for Quantities of Wastes

Wastes arising from the construction work were classified into the following types:

- Construction & demolition materials;
- Construction & demolition wastes;
- Chemical waste;
- Excavated marine sediment.

The quantities of wastes for disposal as of December 2006 are summarized in the following table:

<u>Type of Waste</u>	<u>Cumulative Quantity</u>	<u>Location of Disposal</u>
Contract 617		
1. Construction & Demolition Materials (Ton)	23391	Fill Bank at TKO Area 137
2. Construction & Demolition Wastes (Ton)	252	SENT Landfill
3. Chemical Waste (Litre)	1000	Chemical Waste Treatment Facility
4. Excavated Marine Sediment, Type I (m ³)	3030	Designated Marine Disposal Sites
5. Excavated Marine Sediment, Type II (m ³)	715	Designated Marine Disposal Site

Environmental Complaints

No complaint was received during the reporting period. A summary of environmental complaint since commencement of construction is shown below:

<u>Reporting Period</u>	<u>Frequency</u>	<u>Cumulative</u>	<u>Nature of Complaint</u>
Jun 2006 - Jul 2006	0	0	N/A
Jul 2006 - Aug 2006	0	0	N/A
Aug 2006 - Sep 2006	0	0	N/A
Sep 2006 - Oct 2006	0	0	N/A
Oct 2006 - Nov 2006	0	0	N/A
Nov 2006 - Dec 2006	0	0	N/A
Dec 2006 - Jan 2007	0	0	N/A

Environmental Prosecutions

No environmental prosecution was received during the reporting period. A summary of environmental prosecution since commencement of construction is shown below:

<u>Reporting Period</u>	<u>Frequency</u>	<u>Cumulative</u>	<u>Nature of Prosecution</u>
Jun 2006 - Jul 2006	0	0	N/A
Jul 2006 - Aug 2006	0	0	N/A
Aug 2006 - Sep 2006	0	0	N/A
Sep 2006 - Oct 2006	0	0	N/A
Oct 2006 - Nov 2006	0	0	N/A
Nov 2006 - Dec 2006	0	0	N/A
Dec 2006 - Jan 2007	0	0	N/A

General Matters

In the monthly site audit for Contract 617, the Contractor had been reminded to maintain good site housekeeping and waste management standard. Regular desilting should be conducted in the settlement tank for wheel washing bay. Ponding water should be removed to prevent mosquito breeding. The Action Items identified in the monthly site audit are shown in Annex C.

Status of Licences Obtained by Contractors

A summary of all the relevant permits, licenses on environmental protection for the TKE Phase II Project as of 11 January 2007 is shown below:

<u>Item</u>	<u>Description</u>	<u>Permit Status</u>
	TKE Project	
1.	Environmental Permit No. EP-007/1998/D	Issued to MTRCL on 07/06/06
	Contract 617	
1.	Registration as a Chemical Waste Producer No. WPN5213-839-M2446-10	Issued on 07/07/06
2.	Discharge License No. RE/D1179/839/1	Issued on 11/10/06
3.	CNP for construction works, GW-RE0171-06	Valid (30/06/06 - 15/11/06) - Expired
4.	CNP for construction works, GW-RE0307-06	Valid (28/09/06 - 21/03/07)
5.	Waste Disposal Billing Account No. 7004116	Issued on 23/06/06
6.	Marine Dumping Permit No. EP/MD/07-028	Issued on 10/08/06
7.	Marine Dumping Permit No. EP/MD/07-039	Issued on 29/08/06
8.	Marine Dumping Permit No. EP/MD/07-041	Issued on 05/09/06
9.	Marine Dumping Permit No. EP/MD/07-057	Issued on 22/11/06

Future Key Issues

Based on the site inspection and audit findings and the construction programme in the coming month, key issues to be considered are as follows:

- Dust suppression in dry weather condition;
- Discharge of site effluent from the work sites;
- Management and control of chemical and C&D wastes;
- Management and control of disposal of excavated materials and general refuse.

CONCLUSIONS

General

Monitoring and auditing provide evidence that the TKE Phase II Project is generally being constructed in compliance with the Environmental Permit as the works are being undertaken in an environmentally responsible fashion. Furthermore, the EM&A activities continue to be undertaken to a level consistent with MTRCL Corporate Environmental Policy.

Air Quality

All of the air quality impact monitoring results measured during the monitoring period were found to be within the Action Level and 54% of the Limit Level. This indicated that the on-site construction activities did not have a noticeable adverse effect on the general air quality of the area and remained within the range previously predicted in the TKE Phase II Environmental Impact Assessment Report.

There was no dust level exceedance recorded during the monitoring period.

Environmental Complaints and Prosecutions

There was no complaint and prosecution received during the reporting period.

ANNEX A - Dust Impact Monitoring Results

Samples between: 12/12/2006 and 11/01/2007

Area 86

High Levels

Exceedance

Sample Code	Sample Type	Date	Time	Value	Unit	Action	Target	High	Low
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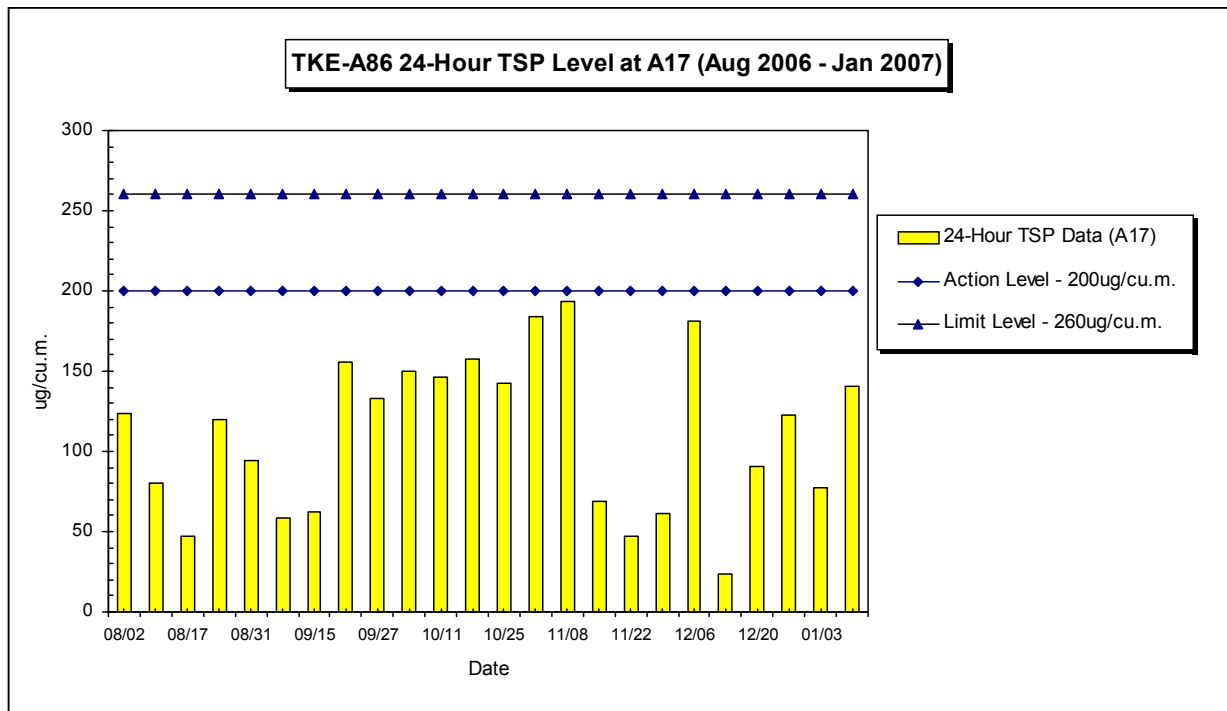
Location: **Landfill Site Boundary (A17)**

Parameter: **Total Suspended Particulate (24 hrs)**

974173	Dust Sample	13/12/2006	10:00	23.2	ug/cu.m	200	260		
974174	Dust Sample	20/12/2006	10:00	90.4	ug/cu.m	200	260		
974175	Dust Sample	27/12/2006	10:00	122.4	ug/cu.m	200	260		
974177	Dust Sample	03/01/2007	10:00	77.4	ug/cu.m	200	260		
974178	Dust Sample	10/01/2007	10:00	140.5	ug/cu.m	200	260		

ANNEX B - Trends of Monitored Parameters

Area 86



ANNEX C - Action Items for Monthly Audits during the Reporting Period

Contract 617 Monthly Audit in November		
	<u>Description</u>	<u>Status</u>
1	The Contractor was reminded to improve the dust suppression measures.	On going
2	The Contractor was reminded to remove/treat stagnant water to stop mosquito breeding.	On going
3	The Contractor was reminded to improve site housekeeping at works areas.	On going
4	The Contractor was reminded to clean the settlement tank regularly.	On going
5	The Contractor was reminded to clear rain water in drip trays.	On going
6	The Contractor was reminded to cover properly soil stockpiles.	On going
7	The Contractor was reminded to increase the frequency of watering the worksite area for the surcharging at Road L861.	On going
8	The Contractor was reminded to clean the access road in front of the site entrance more frequently during the filling of excavated material for the surcharging at Road L861.	On going
Contract 617 Monthly Audit in December		
	<u>Description</u>	<u>Status</u>
1	The Contractor was reminded to improve the dust suppression measures.	On going
2	The Contractor was reminded to remove/treat stagnant water to stop mosquito breeding.	On going
3	The Contractor was reminded to improve site housekeeping at works areas.	On going
4	The Contractor was reminded to clean the settlement tank regularly.	On going
5	The Contractor was reminded to clear rain water in drip trays.	On going
6	The Contractor was reminded to cover properly soil stockpiles.	On going
7	The Contractor was reminded to increase the frequency of watering the worksite area for the surcharging at Road L861.	On going
8	The Contractor was reminded to clean the wheel washing bay more frequently during the filling of excavated material for the surcharging at Road L861.	On going

ANNEX D - Air Baseline Check

Area 86

<u>Location</u>	<u>Date</u>	<u>Current Level (ug/m3)</u>	<u>Previous in 05/06 Level (ug/m3)</u>	<u>Established Baseline Value in 01/99</u>
Landfill Site Boundary (A17)	31/12/06	144.6	119.8	149.0