

Monthly Executive Summary



Mass Transit Railway Corporation
EQPMS

Month: September
Year: 2008
Project: TKE

Description:

TSEUNG KWAN O EXTENSION PHASE II

EM&A Report No. 27

EXECUTIVE SUMMARY

This is the twenty 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 August 2008 to 11 September 2008 for the following contracts:

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 commenced in June 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 Contractors 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. In addition, no environmental complaint and prosecution was received in the reporting period. The civil construction work for the TKS Station has been completed in the reporting period.

IMPACT MONITORING

Construction Activities in Area 86

Major site activities carried out by Contract 617 during the reporting period included external works construction and BS installation in the station together with drainage and roadworks construction for Road L861.

Major site activities carried out by Contract 606A during the reporting period included minor defects rectification.

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

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;
7. Labels for the chemical waste storage container should be displayed at prominent location.

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 August 2008 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)	37606	Fill Bank at TKO Area 137
2. Construction & Demolition Wastes (Ton)	2140	SENT Landfill
3. Chemical Waste (Litre)	1200	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
Contract 606A		
1. Construction & Demolition Materials (Ton)	450	Fill Bank at TKO Area 137
2. Construction & Demolition Wastes (Ton)	160	SENT Landfill
3. Chemical Waste (Litre)	210	Chemical Waste Treatment Facility

Environmental Complaints

No environmental complaint was received in 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 - Sep 2006	0	0	N/A
Sep 2006 - Dec 2006	0	0	N/A
Dec 2006 - Mar 2007	0	0	N/A
Mar 2007 - Jun 2007	1	1	Dust
Jun 2007 - Sep 2007	0	1	N/A
Sep 2007 - Dec 2007	0	1	N/A
Dec 2007 - Mar 2008	0	1	N/A
Mar 2008 - Jun 2008	1	2	Water
Jun 2008 - Jul 2008	0	2	N/A
Jul 2008 - Aug 2008	0	2	N/A
Aug 2008 - Sep 2008	0	2	N/A

Environmental Prosecutions

No environmental prosecution was received in 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 - Sep 2006	0	0	N/A
Sep 2006 - Dec 2006	0	0	N/A
Dec 2006 - Mar 2007	0	0	N/A
Mar 2007 - Jun 2007	0	0	N/A
Jun 2007 - Sep 2007	0	0	N/A
Sep 2007 - Dec 2007	0	0	N/A
Dec 2007 - Mar 2008	0	0	N/A
Mar 2008 - Jun 2008	2	2	APCO
Jun 2008 - Jul 2008	0	2	N/A
Jul 2008 - Aug 2008	0	2	N/A
Aug 2008 - Sep 2008	0	2	N/A

General Matters

In the monthly site audit for Contract 617, the Contractor had been reminded to maintain 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. In addition, the Contractor had been reminded to maintain the frequency of water spraying on the haul roads and works areas, properly cover stockpiles and install green nets as dust control measures. The Action Items identified in the monthly site audit are shown in Annex C.

In the monthly site audit for Contract 606A, the Contractor had been reminded to maintain good site housekeeping and waste management standard. 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 September 2008 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.	Discharge License No. RE/D1192/839/1	Issued on 07/12/07
4.	CNP for construction works, GW-RE0171-06	Valid (30/06/06 - 15/11/06) - Expired
5.	CNP for construction works, GW-RE0307-06	Valid (28/09/06 - 21/03/07) - Expired
6.	CNP for construction works, GW-RE0051-07	Valid (22/03/07 - 21/09/07) - Expired
7.	CNP for construction works, GW-RE0263-07	Valid (22/09/07 - 21/03/08) - Withdrawn
8.	CNP for construction works, GW-RE0389-07	Valid (02/01/08 - 20/05/08) - Expired
9.	CNP for construction works, GW-RE0138-08	Valid (21/05/08 - 20/11/08)
10.	Waste Disposal Billing Account No. 7004116	Issued on 23/06/06
11.	Marine Dumping Permit No. EP/MD/07-028	Issued on 10/08/06
12.	Marine Dumping Permit No. EP/MD/07-039	Issued on 29/08/06
13.	Marine Dumping Permit No. EP/MD/07-041	Issued on 05/09/06
14.	Marine Dumping Permit No. EP/MD/07-057	Issued on 22/11/06
	Contract 606A	
1.	Registration as a Chemical Waste Producer No. WPN5218-839-H3003-02	Issued on 12/06/07
2.	CNP for construction works, GW-RE0099-07	Valid (15/04/07 - 14/10/07) - Expired
3.	CNP for construction works, GW-RE0175-07	Valid (02/07/07 - 14/08/07) - Expired
4.	CNP for construction works, GW-RE0296-07	Valid (15/10/07 - 14/04/08) - Expired
5.	Waste Disposal Billing Account No. 7004391	Issued on 24/08/06

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 disposal of C&D wastes 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 69% 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 environmental complaint and prosecution received in the reporting period.

ANNEX A - Dust Impact Monitoring Results

Samples between: 12/08/2008 and 11/09/2008

Area 86

High Levels

Exceedance

Sample Code	Sample Type	Date	Time	Value	Unit	Action	Target	High	Low
-------------	-------------	------	------	-------	------	--------	--------	------	-----

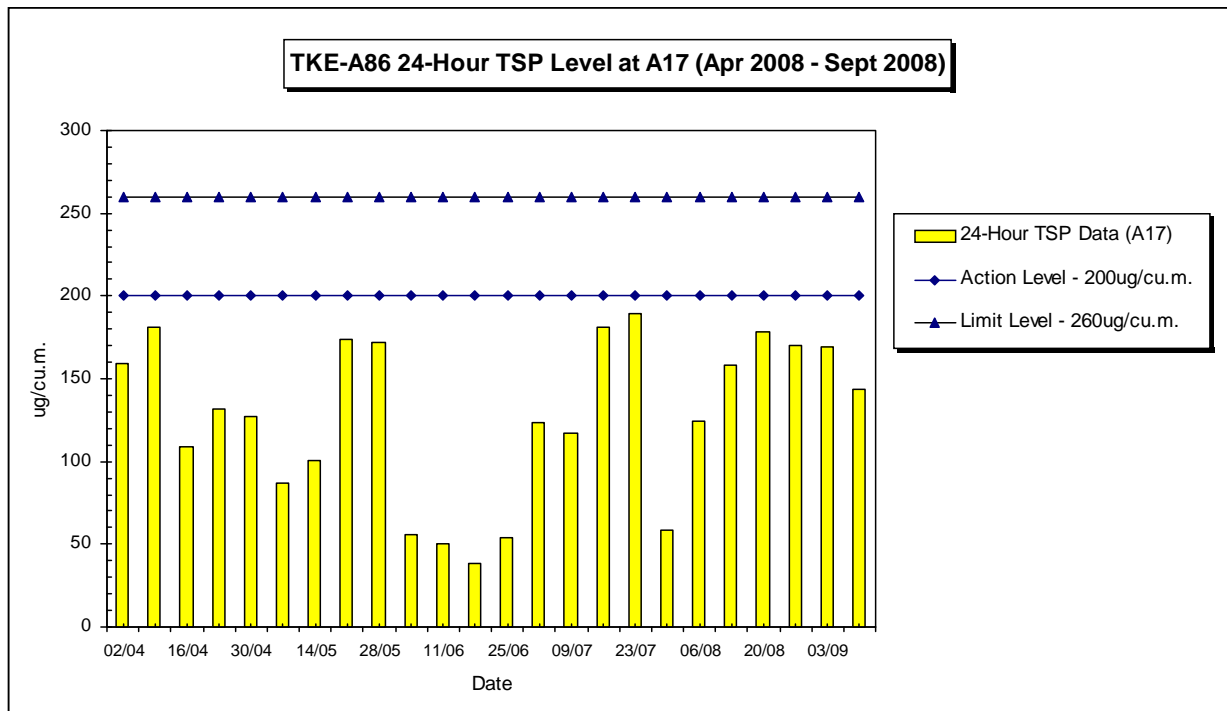
Location: **Landfill Site Boundary (A17)**

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

974264	Dust Sample	13/08/2008	10:00	158.0	ug/cu.m	200	260		
974265	Dust Sample	20/08/2008	10:00	178.7	ug/cu.m	200	260		
974266	Dust Sample	27/08/2008	10:00	170.1	ug/cu.m	200	260		
974267	Dust Sample	03/09/2008	10:00	169.1	ug/cu.m	200	260		
974268	Dust Sample	10/09/2008	10:00	143.5	ug/cu.m	200	260		

ANNEX B - Trend of Monitored Parameter

Area 86



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

Contract 617 Monthly Audit in July 2008		
	<u>Description</u>	<u>Status</u>
1	The Contractor was reminded to maintain 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 maintain 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 install green nets and properly cover stockpiles as dust control measures.	On going
Contract 617 Monthly Audit in August 2008		
	<u>Description</u>	<u>Status</u>
1	The Contractor was reminded to maintain 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 maintain 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 install green nets and properly cover stockpiles as dust control measures.	On going
Contract 606A Monthly Audit in July 2008		
	<u>Description</u>	<u>Status</u>
1	The Contractor was reminded to remove/treat stagnant water to stop mosquito breeding.	On going
2	The Contractor was reminded to maintain site housekeeping at works areas.	On going
Contract 606A Monthly Audit in August 2008		
	<u>Description</u>	<u>Status</u>
1	The Contractor was reminded to maintain site housekeeping at works areas.	On going