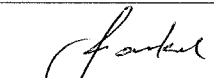



**PAUL Y. – CREC(HK) JOINT VENTURE**

Contract No. CV/2004/13

**Temporary Construction Waste Sorting  
Facilities at Tseung Kwan O Area 137  
and Tuen Mun Area 38****Quarterly EM&A Summary Report No. 18  
(for the months February 10 to April 10  
at Tseung Kwan O Area 137)**

[06/2010]

	Name	Signature
Prepared & Checked:	Jackel Law	
Reviewed & Approved:	Y T Tang	

Version: 0 Date: 4 June 2010

The information contained in this report is, to the best of our knowledge, correct at the time of printing. The interpretation and recommendations in the report are based on our experience, using reasonable professional skill and judgment, and based upon the information that was available to us. These interpretations and recommendations are not necessarily relevant to any aspect outside the restricted requirements of our brief. This report has been prepared for the sole and specific use of our client and AECOM Environment accepts no responsibility for its use by others.

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AECOM Asia Co. Ltd.  
11/F, Grand Central Plaza, Tower 2, 138 Shatin Rural Committee Road, Shatin, NT, Hong Kong.  
Tel: (852) 2893 1551 Fax: (852) 2891 0305 www.aecom.com

**Important Message****Rebranding as AECOM**

To better serve our clients, all Maunsell AECOM operations in Hong Kong have been integrated into one operating entity and rebranded as AECOM. The ENSR Asia (HK) Limited operation is now part of AECOM Asia Co. Ltd.

ENVIRON

Ref.: CEDPFRSFEM00\_0\_0172L.10.doc

4 June 2010

By Post and Fax No.: 2891 0305

AECOM Asia Company Limited  
11/F Grand Central Plaza, Tower 2  
138 Shatin Rural Committee Road  
Shatin, Hong Kong

Attention: Mr. Y. T. Tang / Mr. Jackel Law

Dear Sirs,

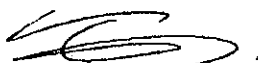
**Re: Contract No. CV/2004/13  
Temporary Construction Waste Sorting Facilities  
at Tseung Kwan O Area 137 and Tuen Mun Area 38  
Quarterly EM&A Summary Report No. 18 for TKO Area 137  
for February 2010 – April 2010**

Reference is made to your submission of the draft Quarterly EM&A Summary Report for February 2010 – April 2010 for TKO Area 137 by E-mail on 3 June 2010.

We are pleased to inform you that we have no comments on the captioned report.

Thank you very much for your attention and please do not hesitate to contact our Simon Lam or the undersigned should you have any queries.

Yours faithfully,



Tony Cheng  
Independent Environmental Checker

c.c. CEDD  
Paul Y – CREC(HK)JV

Attn: Mr. H. C. Tang  
Attn: Mr. K. W. Chan

Fax No.: 2714 0113  
Fax No.: 2623 9426

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## EXECUTIVE SUMMARY

### Introduction

This is the eighteenth Quarterly Environmental Monitoring and Audit (EM&A) Summary Report prepared by AECOM Asia Company Limited (integrating the operation of ENSR Asia (HK) Ltd.) for the "Temporary Construction Waste Sorting Facility at Tseung Kwan O Area 137" (The Project). This report documents the findings of EM&A Works conducted during the impact period from February 2010 to April 2010.

The activities carried out from February 2010 to April 2010 were:

- Operation of Combined Reception and Exit Office (CREO);
- Operation of Construction Waste Sorting Facilities (CWSF);
- Disposal of sorted waste to Landfill and Public Fill reception facilities;
- Maintenance of haul road; and
- Operation of Portion B3.

### Environmental Monitoring Works

#### EM&A Programme

A summary of monitoring and audit activities conducted in the reporting quarter is listed below:

24-hour TSP monitoring	13	sessions
1-hour TSP monitoring	39	sessions
Environmental Site Inspection	13	sessions

#### Air Quality

##### *1-hr TSP Monitoring*

All the monitoring data complied with the AL levels in the reporting quarter. The 1-hr TSP monitoring results remained at an acceptable level during the construction and operation of the CWSF.

##### *24-hr TSP Monitoring*

One Limit Level exceedance of 24-hr TSP monitoring was recorded at TKO2 in the reporting quarter. It was considered related to the poor regional air quality and not related to the project. The rest of the 24-hr TSP monitoring results remained at an acceptable level during the construction and operation of the CWSF.

#### Complaints, Non-compliance and Prosecutions

No complaint, non-compliance or prosecution was received in the reporting quarter.

## 1. INTRODUCTION

### Scope of Report

- 1.1 This is the eighteenth Quarterly Environmental Monitoring and Audit (EM&A) Summary Report for the Temporary Construction Waste Sorting Facility at Tseung Kwan O Area 137 (the Project). This report presents a summary of the environmental monitoring and auditing works carried out by the ET for the Project for the period from February 2010 to April 2010.

### Project Organization and Contacts of Key Management

- 1.2 The project organization is shown in Appendix A. The key personnel contact names and numbers are summarised in Table 1.1

**Table 1.1 Contact Information of Key Personnel**

Party	Position	Name	Telephone	Fax
CEDD	Engineer	Mr. H C Tang	2762 5602	2714 0113
IC(E) ( <i>Environ</i> )	IC(E)	Mr. Tony Cheng	3743 0722	3548 6988
Contractor ( <i>Paul Y -CREC(HK) JV</i> )	Project Manager	Mr. K W Chan	6682 0192	2623 9426
	Site Agent	Mr. Y T Wong	9475 6376	--
ET ( <i>AECOM</i> )	ET Leader	Mr. Y T Tang	3105 8537	2891 0305

### Construction Programme

- 1.3 The construction phase under Contract CV/2004/13 – Temporary Construction Waste Sorting Facility at Tseung Kwan O Area 137 commenced on 12 November 2005. The activities during this reporting quarter included:
- Operation of Combined Reception and Exit Office (CREO);
  - Operation of Construction Waste Sorting Facilities (CWSF);
  - Disposal of sorted waste to Landfill and Public Fill reception facilities;
  - Maintenance of haul road; and
  - Operation of Portion B3.
- 1.4 The general layout plan of the Project sites showing the contract areas are shown in Figure 1.1.
- 1.5 The construction programme is provided in Appendix B.

## **2. ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS**

### **Monitoring Parameters**

- 2.1 The EM&A Manual designated a monitoring station to monitor environmental impacts on air quality due to the Project. The monitoring location is depicted in Figure 2.1.
- 2.2 The EM&A Manual also required environmental site inspections for air quality, noise, water quality, chemical and waste management and landscape and visual.

### **Environmental Quality Performance Limits (Action/Limit Levels)**

- 2.3 The environmental quality performance limits (i.e. Action/Limit Levels) were derived from the baseline monitoring results of the Fill Bank at Tseung Kwan O Area 137, and are given in Appendix C.

### **Environmental Mitigation Measures**

- 2.4 Relevant environmental mitigation measures were stipulated in the Particular Specification and EP (No.: EP-134/2002/H) for the Contractor to adopt. A list of mitigation measures and their implementation statuses are given in Appendix D.

### 3. MONITORING RESULTS

#### Air Quality

- 3.1 Air quality monitoring, including 1-hr and 24-hr TSP, was conducted three times a week and once a week respectively, in accordance with the EM&A Manual.
- 3.2 The weather was generally dry and windy during the reporting period. The monitoring data and trend of air quality for the reporting quarter are given in Appendix E. Major dust sources of the temporary CWSF were dump truck traffic, dumping and sorting activities inside the CWSF. Other dust sources were the dump truck traffic inside and outside of the Fill Bank.
- 3.3 There was no 1-hour TSP monitoring exceedance recorded in the reporting quarter.
- 3.4 However, one Limit Level exceedance of 24-hr TSP monitoring was recorded at TKO2 on 22 March 2010. The exceedance was considered related to the poor regional air quality and not related to the project.
- 3.5 Table 3.1 presents the number of exceedances recorded in each month of the reporting quarter. The number of monitoring events included regular monitoring events and additional ones, if any.

**Table 3.1 Summary of Number of Exceedances for 1-hr & 24-hr TSP Concentration**

Monitoring Parameter	Level of Exceedance	Month		
		Feb 10	Mar 10	Apr 10
1-hr TSP	No. of monitoring events	12	15	12
	Action	0	0	0
	Limit	0	0	0
	Total	0	0	0
24-hr TSP	No. of monitoring events	4	5	4
	Action	0	0	0
	Limit	0	1	0
	Total	0	1	0

#### Environmental Site Inspection

- 3.6 There were 13 site inspections conducted in the reporting quarter to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. The major concerns for the Project are air quality and waste management on site.
- 3.7 General refuse accumulated inside desilting pit and u-channel at Area B2; general refuse accumulated at Area B1 and Area A; silty material accumulated at Area B2; haul road at Area B2 being dry; stagnant water and general refuse under the stair of CREO; stagnant water accumulated at Area B1; silt accumulated inside the trapezoidal channel at Area A; oil stains on the ground at Area B1 and near CWSF were observed during the site inspections in the reporting quarter. The Contractor was also reminded to post the Environmental Permit at all vehicle site entrance; to pump out the muddy water inside the wheel washing facility at site exit regularly to prevent overflow; to spray the access road with water more frequently to maintain the access road surface wet. Recommendations were issued to Contractor for follow-up action.
- 3.8 The implementation status of environmental mitigation measures are given in Appendix D.
- 3.9 Major dust sources in the temporary CWSF would be the dumping activities, loading/unloading activities, manual sorting of non-inert waste and dump truck traffic inside the CWSF. Mitigation measures, including operation of wheel-washing facilities had been implemented, more water sprinklers were installed and water truck had been deployed to dampen the haul road.

- 3.10 Besides the afore-said issues, the Contractor was reminded to maintain the drainage systems regularly. It was recommended to clear the general refuse, stagnant water and silt in desilting pit and trapezoidal channel regularly, arrange additional maintenance for the silt trap at the wheel washing bay and oil interceptor pump pit before and after rainstorms so as to ensure their maximum treatment capacities.
- 3.11 The Contractor had obtained the effluent discharge license on 13 November 2006.

**Advice on Solid and Liquid Waste Management Status**

- 3.12 There was disposal of sorted inert material and sorted non-inert material. No disposal of metal, chemical waste and C&D waste were made in the reporting quarter in the reporting quarter.
- 3.13 The Contractor was advised to provide drip trays to all chemicals containers and implement sufficient preventive measures, including placing tarpaulin sheets or drip tray on ground, during equipment maintenance works to avoid oil leakage on the ground. In the event of oil leakage, the Contractor should clean up the polluted soil and dispose of as chemical waste.



#### 4. SUMMARY OF NON-COMPLIANCE (EXCEEDANCES) OF ENVIRONMENTAL QUALITY

##### Summary of Exceedances and Review of the Reasons for non-compliance

- 4.1 There was no 1-hr exceedance in the reporting quarter.
- 4.2 One Limit Level exceedance of 24-hr TSP monitoring was recorded at TKO2 on 22 March 2010. The exceedance was considered related to the poor regional air quality and not related to the project.

#### 5. ENVIRONMENTAL COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTION

- 5.1 No environmental complaint, notification of summons and prosecution was received in the reporting quarter.
- 5.2 Table 5.1 summarized the complaints, summons and successful prosecution received in the reporting period.

**Table 5.1 Summary of Environmental Complaints and Prosecutions**

	Feb 10	Mar 10	Apr 10	Total
Complaints logged	0	0	0	0
Summons served	0	0	0	0
Successful Prosecution	0	0	0	0
Total	0	0	0	0

## 6. COMMENTS, RECOMMENDATIONS AND CONCLUSIONS

### Comments on Mitigation Measures

#### *Air Quality*

- 6.1 The major dust sources were the dumping activities, loading/unloading activities, manual sorting of non-inert waste and dump truck traffic on the haul road. Wheel washing facilities had been provided and water truck had been deployed to dampen the haul road.
- 6.2 The Contractor was advised to operate mist spraying systems and automatic water sprinklers in the temporary CWSF.
- 6.3 All vehicles should be washed before leaving the site egress by provision, operation and maintenance of automatic wheel washing facilities.

#### *Water Quality*

- 6.4 Maintenance of the drainage system, including the trapezoidal channels, is required.
- 6.5 Remove the stagnant water or provide pesticide for the stagnant water in the desilting chambers.

#### *Chemical and Waste Management*

- 6.6 Remove waste materials from site regularly to avoid accumulation.
- 6.7 Plants should be properly maintained to prevent oil leakage.
- 6.8 Oil stains on ground should be removed as soon as possible and disposed of as chemical waste.
- 6.9 Handle and store chemical waste properly.
- 6.10 Provide and maintain sufficient drip trays for diesel drums, chemical containers, chemical waste storage drums and diesel operated generator.
- 6.11 Maintain good house keeping at works area.

### Recommendations on EM&A Programme

- 6.12 The impact air quality monitoring programme confirmed that any air quality impact from the site activities would be readily detected and timely actions could be taken to rectify any non-compliance.
- 6.13 The EM&A programme effectively monitored the environmental impacts from the site activities and no particular recommendations were advised for the improvement of the programme.

### Conclusion

- 6.14 Environmental monitoring of air quality (1-hr TSP and 24-hr TSP) for the Project was performed from February 2010 to April 2010. There was no 1-hr TSP exceedance in the reporting quarter. One Limit Level exceedance of 24-hr TSP monitoring was recorded at TKO2 in the reporting quarter. It was considered related to the poor regional air quality and not related to the project.
- 6.15 No complaint, prosecution or notification of summon was received in the reporting quarter.